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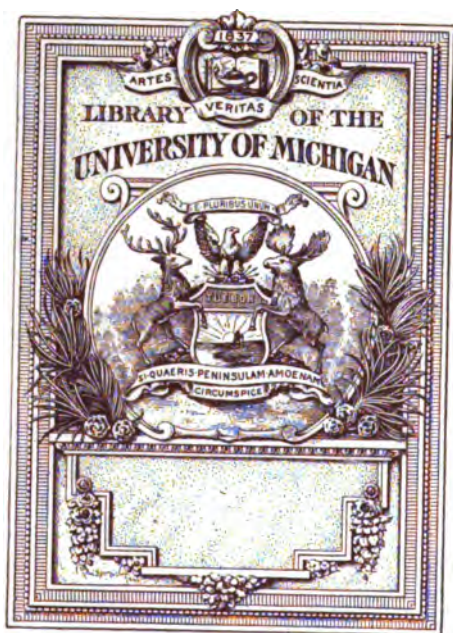
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THE MAGAZINE
OF
HORTICULTURE,
BOTANY,

AND ALL USEFUL DISCOVERIES AND IMPROVEMENTS IN
RURAL AFFAIRS

"Je voudrais échauffer tout l'univers de mon got pour les jardins. Il me semble qu'il est impossible qu'un méchant puisse l'avoir. Il n'est point de vertus que je ne suppose à celui que aime à parler et à faire des jardins. Pères de famille, inspirez la jardinomanie à vos enfants."—*Prince De Ligne*.

VOL. VII.
1841.

EDITED BY C. M. HOVEY.

BOSTON:
PUBLISHED BY HOVEY AND CO., MERCHANTS ROW.
NEW YORK:
ISRAEL POST, BOWERY.
1841.

PREFACE.

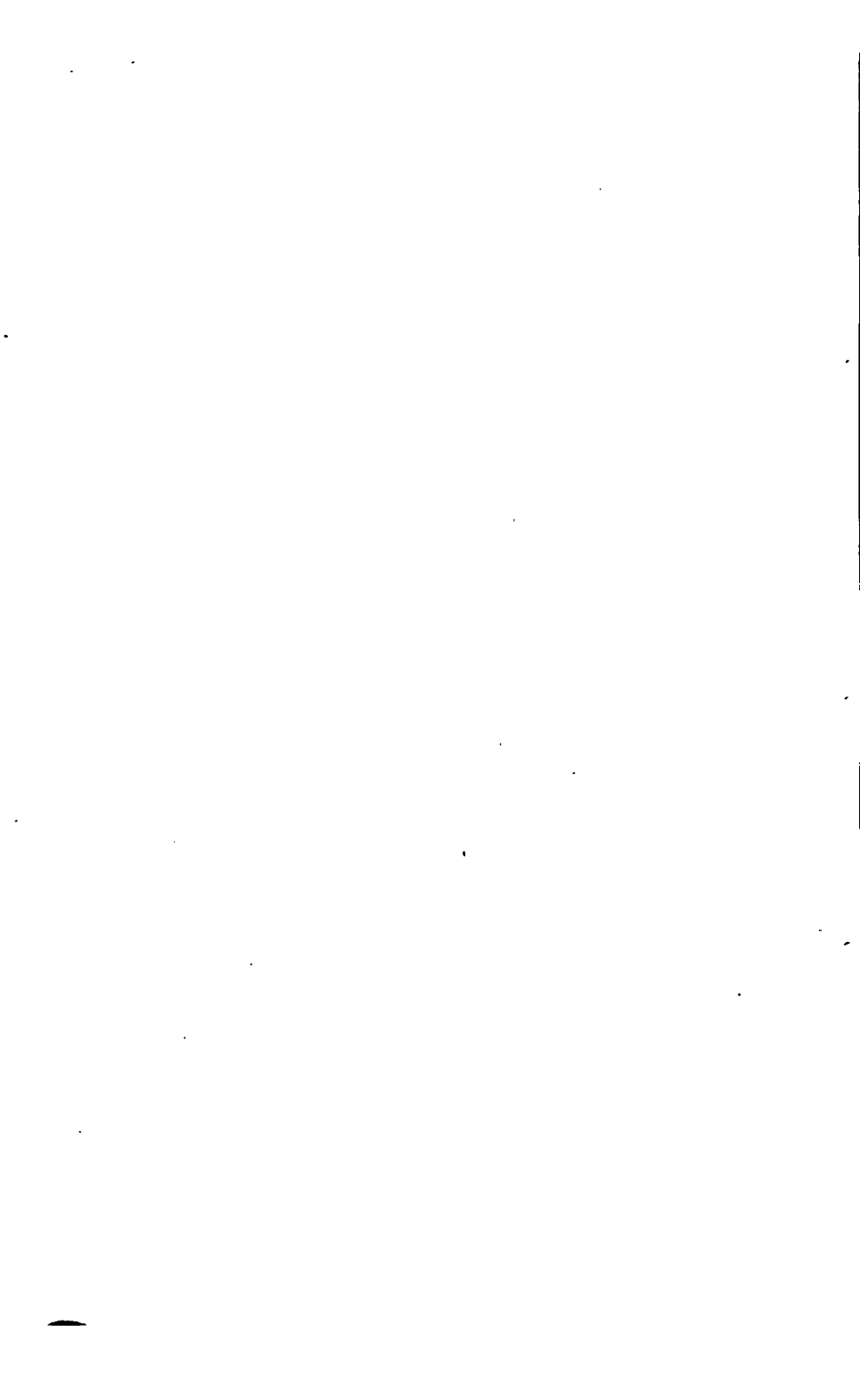
THE Seventh Volume of the Magazine contains a great number of valuable Original Communications, upon almost every branch of Horticulture. Space will not allow us to allude to only a few of those which possess particular interest.

The article by our correspondent, Mr. Manning, describing upwards of a hundred varieties of apples, which he has proved at his Pomological Garden, in Salem, is one of the most excellent papers we have ever published; invaluable to those who wish to make a choice selection of apples for a garden. Mr. Walker's communication on the culture of the tulip, is a plain and practical treatise, so full and complete in all the particulars of the growth of this splendid flower, that any one may be enabled to bloom it in great beauty. To our botanical readers, the article by Mr. Oakes, upon several new plants of New England, will afford a rich treat. The paper read before the Massachusetts Horticultural Society, from Mr. Haggerston, upon the destruction of the rose slug, is of great value. Dr. Hildreth's article, on the state of gardening in Ohio, and the cultivation of plants in that climate, is highly interesting, and contains many useful hints, worthy the attention of every cultivator. The first article of our series of illustrations of the principles of landscape gardening has been given, containing a notice of the elegant residence of our correspondent, Mr. Downing, Newburgh, N. Y. It will serve as a copy of what we intend to continue in our next volume. Besides these, there are many other articles, which possess equal interest. The Reviews in this volume comprise a great amount of information, particularly that of *Liebig's Chemistry*. Under our General and Foreign Notices will be found the gleanings of the English periodicals, detailing the cultivation of many plants, fruits, and flowers.

For the ready assistance which we have received from our friends, we again offer our thanks. To their aid the Magazine is indebted for much of its interest; and we trust they will continue the same kindness towards us, as in years past.

Boston, Dec. 1841

C. M. H.



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THE MAGAZINE

OF

HORTICULTURE.

JANUARY, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *A Retrospective View of the Progress of Horticulture in the United States, during the past year.* By the EDITOR.

WITH the return of another year, it becomes our duty to take a glance at the progress which has been made in horticultural improvement, the past year, and to lay before our readers, as briefly as possible, some account of what has been accomplished in the various departments of gardening. A taste for plants and flowers continues to spread throughout the country, and a desire to possess fine gardens is becoming more apparent every where. But not so much has been effected during the season, as had been anticipated from the attention which has been given to the subject, in previous years. This has resulted from various causes, the principal of which have undoubtedly been the embarrassed state of commercial affairs, and the interest which has been taken in political questions, which have agitated the public, and withdrawn their attention from other objects. But, as the latter have now happily passed away, we may look again for a revival of that taste which has heretofore been manifested by a great portion of the community. We may confidently expect that gardening pursuits will attract more attention, and that horticulture will soon make more rapid advances, than has hitherto attended its progress.

The season of 1840, which has just closed, was unusually fine; probably more favorable to vegetation than any previous one for several years. The winter of 1839—40 was not severe, and no injury, that we know of, was sustained by trees and plants. The month of May opened delightfully, and from that time, to the early part of June, the weather was warm, accompanied with genial rains and refreshing showers, and quite remarkable for the absence of easterly storms, which often prevail at that season: vegetation advanced rapidly. From the middle of June, however, to the latter part of July, there was scarcely a single shower, and throughout a greater portion of the State, as well as the northern part of New York, quite a drought prevailed, and fears were entertained for the loss of crops; but it was not of sufficient duration to do them material injury. Early in August, the weather, which had been hot and dry throughout June, became cooler, and several heavy showers fell during the month, from which period, up to November, there was a due quantity of rain, which brought forward crops that were retarded by the drought, with great rapidity, and a more abundant harvest has rarely been reaped. November, though a mild month, was disagreeable, from the long duration of cloudy and foggy weather, accompanied with heavy rains, amounting, in the quantity which fell, to upwards of ten inches, being the greatest quantity which has fallen in one month, except in one instance, for ten or twelve years.

Corn, which in New England has been, for a few years back, a rather uncertain crop, has fully ripened every where. The wheat crops of the west have been very large. The potato crop of Maine, which, in 1839, was injured by too much rain, has been much larger than usual. Fruit, of most all sorts, has been abundant, and of excellent quality; and the products of the kitchen garden have been of uncommon size and superiority.

Our remarks will be arranged under the various heads of Horticulture, Floriculture, Arboriculture, Landscape Gardening, Public Gardens, Commercial Gardens, Cemeteries, &c.

HORTICULTURE.

In this department, considerable attention has been devoted to fruit trees, and the cultivation of new varieties, particu-

larly of pears. So far as regards the importation of new sorts, very little has been done the past year. Several new kinds raised from seed, have been brought into notice, and they have appeared to possess valuable qualities: some of them will be more fully noticed in this volume. We have, in the past volume, described a few new plums, raised by Mr. Corse, of Montreal, which are said to possess great merits; they have not, however, yet been introduced into our gardens. The new seedling strawberry, which we have heretofore noticed, a production of our own, has been fully described in the past volume. It was exhibited at the Massachusetts Horticultural Society's rooms, and pronounced, by all who saw the fruit, to be, without hesitation, the finest variety ever presented to the society. For an extended account of its origin, productiveness, &c., the reader is referred to Vol. VI., p. 284. We would invite amateurs and cultivators, who feel desirous of possessing superior fruits, to the importance of raising seedlings, for it is from that source that we are to look for fruit, upon the good qualities of which we can rely with certainty.

Mr. Manning has fruited a few new pears the past year, and he will probably give us some account of the same: his remarks on some of the finest new sorts, as well as Mr. Downing's excellent paper on the same subject, in the last volume, will be found valuable to all who are making a collection of fine varieties. Mr. Wilder, the President of the Massachusetts Horticultural Society, exhibited a great variety of remarkably fine specimens of pears—next in number to Mr. Manning. Mr. Manning has fruited, and corrected the synonimes of a great number of apples, and we have the promise of an article from him, for our Pomological Notices, describing all the finest kinds. Mr. Manning has also raised some seedling cherries, which have been noticed in the reports of the Massachusetts Horticultural Society, for the past year. It will be gratifying to our friends to learn that Mr. Manning will extend the sphere of his operations, by adding two or three acres of land to his nursery.

The *Seymour* system of training peach trees has now been practised for three years, at Mr. Cushing's, Watertown, by Mr. Haggerston, and he has found it, thus far, to be the best method which he has ever known, for training the peach, either in peacheries, or on the wall in the open air. The trees are perfect models of symmetry and neatness, and there

is no crowding of the branches, nor confusion in laying in the new wood, every shoot having its proper place assigned beforehand. We shall endeavor, with the assistance of Mr. Haggerston, to give an account of this system of training, illustrated with engravings. Since last season, Mr. Cushing has given up the cultivation of the pine-apple; the fig, however, is extensively grown in pots, and there will be a good crop this year. The collection embraces several of the best varieties.

The subject of the blight, in pear trees, has hitherto attracted much attention from practical men. The Pennsylvania Horticultural Society, impressed with the importance of discovering some method by which its ravages could be prevented, offered the liberal sum of five hundred dollars to the person who should lay before them a satisfactory method of preventing or curing the disease. Numerous communications, we believe, have been made to the society, but the character of these papers has not been made known. We have noticed this, to refer our readers, who have trees subject to this too prevalent disease, to the remarks in our last volume, (p. 414.) by Mr. Lazell, of Columbus, Ohio, on the blight. Mr. Lazell is a gentleman upon whom we can rely for correct information, and we should be glad to see the experiment tried by some of our friends, that its efficacy may be thoroughly tested. Mr. Gordon's observations on propagating pear and apple trees, by grafting upon the roots, is an interesting and valuable paper.

Our correspondent, Mr. A. J. Downing, of the Botanic Garden and Nursery, Newburgh, N. Y., is constantly adding to his already fine collection of fruit trees, and has now a large stock of the newer pears. In Philadelphia, there has considerable been accomplished, which will be mostly found under the head of Commercial Gardening. The cultivation of the grape, in vineries, is extending, and in various parts of the country we learn of the erection of houses devoted to their growth. Grapes command a good price, and the market may be supplied in such abundance as to be sold cheaper, and yet pay a handsome profit. The cultivation of peaches is again attracting more attention from cultivators around Boston. From various adverse circumstances, for several years, until the two past, the trees have produced scarcely any fruit, but last year and year before, the prospect of a fair crop has been so promising, and in many instances been realized, that numer-

ous trees have been set out, and a large number will be planted another year. The banana has fruited in the hot-house of J. A. Perry, Esq., Brooklyn, N. Y.

In the vegetable department of horticulture there continues to be more attention given. In our last volume, articles on the growth of celery and other vegetables, have appeared, which have supplied much useful information: we shall endeavor to offer, from time to time, articles upon the cultivation of other vegetables, which will assist those who have not had sufficient experience. At the Worcester Horticultural Society's exhibition, there was a good display of various kinds, some remarkable for their size; and we need only refer to the report of the Pennsylvania Horticultural Society, (Vol. VI., p. 465,) to show the interest which has been created in the production of superior vegetables, by the offer of a few liberal premiums. The Massachusetts Horticultural Society has also set a good example, by offering premiums, but not of sufficient amount to induce many cultivators to take interest enough to become competitors. Other societies, we trust, will not neglect to encourage so important a branch as the kitchen garden.

FLORICULTURE.

The introduction of new plants from abroad, as we have before remarked, at the close of the last volume, has been very limited. We are not aware of but few new things, of any importance, which have been added to our collections during the year. The desire for the possession of new plants is not so great as it has been in previous years. In the indiscriminate introduction of every plant which has been glowingly described in periodicals, amateurs have found that many of them were not of sufficient merit to deserve a place in a good collection, and they are now selected more with regard to their intrinsic beauty, than for their rarity. The demand for new plants has also been limited within the past year. Of the small number of plants which have been introduced from Britain, we may mention *Salvia patens*, a splendid species, with brilliant blue flowers; and *Ipomæa rubro cærulea*, which is now in full bloom at the Public Garden, and one of the most showy of the *ipomæas*.

In our Floricultural Notices will be found a variety of valuable information upon new plants, to which we refer our

readers: these notices have embraced nearly all the more important kinds which have been figured in the botanical and floricultural periodicals; very few of them, however, have yet been introduced. Some new plants have been raised in Philadelphia, from seeds received from some of the botanists connected with the Exploring Expedition, the names of which will be found in the reports of the Pennsylvania Horticultural Society, in the last volume.

The attention of cultivators appears to be turned now to the importance of producing seedling plants. Thousands of camellias have been raised, and cultivators are preparing to plant still more extensively. Many fine varieties have been the result of their experiments, thus far, and from the pains which have been taken to procure seeds by hybridization, it is anticipated that a fine treat is in store for the lovers of this most splendid tribe. The verbena has become such a universal favorite, and the seedling plants are brought into bloom so soon after planting, that many cultivators have attempted the production of new kinds; the number of varieties considerably exceeds those which have been described in foreign periodicals, and we may state, without much doubt, that our gardens contain a finer collection than is to be any where else obtained: all the new ones, of any merit, have been described in our last volume. Several fine dahlias have been raised in Philadelphia, and Mr. Hancock, of Burlington, has a hundred or more, which promise to be superb.

The singular but splendid tribe of Cacti is becoming a greater favorite: some new kinds have been added to collections, which will be noticed in another page. The growth of the plants, since the appearance of the papers by Mr. Russell, and our own, seems to have been better understood, and flowers are now produced more abundantly. The great display of different species, by J. B. Smith, Esq., at the last exhibition of the Pennsylvania Horticultural Society, will show the extent to which this family is cultivated among the amateurs of that city. An interest has been created in that showy and superb flower, the pæony, by the exhibition of blooms, for premiums, by the Massachusetts Horticultural Society: the effect will be to disseminate mere speedily and extensively, the white, and other fine new sorts.

The great tulip show of Mr. Walker, which was last spring made in the Public Garden, agreeably to an arrangement with the proprietors, will next season take place at his own garden,

in Roxbury; but it is to have a rival in a magnificent collection of one thousand bulbs, imported by the Public Garden, from the great tulip fancier, Mr. Groom, and planted on the same spot where Mr. Walker's stood last spring; some of the roots are valued at ten guineas. A good result will arise from this. Mr. Walker's will be inspected by every admirer of the tulip, for its known collection of first-rate prize flowers; and the collection at the Public Garden, from its proximity to the city, will attract thousands of visitors who would not, perhaps, have the time or the inclination to visit Mr. Walker's. The Public Garden has also a collection of fine ranunculuses. In addition, they have also lately received a fine collection of Cape bulbs, including sparaxises, ixias, babianas, &c. &c.

In Salem, Mr. W. F. Gardiner has a large stock of seedling camellias, but he has not yet flowered any of much beauty. Mr. Cabot has made some recent importations of herbaceous plants, among which are some new kinds. His collection is already one of the best in the country, and we hope to give a list of the great number in his possession. Mr. Johnson's experiments in his flower garden, in Lynn, we have noticed in the past volume, as also those of Mr. Sweetser, at Woburn. In New York some new gardens have been laid out: some remarks will be found in our last volume (VI., p. 413,) upon several places which were not known to us previously. In Brooklyn, Mr. Becar and Mr. Perry continue to embellish their grounds and add to their collections, but the public taste is not yet aroused. The society which was formed in 1839 has ceased to exist, after having been in operation but little upwards of a year. Our attentive correspondents in Rochester have furnished us with some information of the state of horticulture in the western part of the State, which will be found in another article in this number. In Philadelphia there seems to be more activity in floricultural pursuits than in any other city: a great many individuals have become members of the Horticultural Society during the year, and we learn from our correspondents that several fine green-houses have been erected. Mr. Dundas, son-in-law of the late Mr. Pratt, of Lemon Hill, has built a splendid edifice on Walnut street, with a green-house, well laid out by Mr. Walter, architect: the green-house is thirty-six feet long, with a beautiful conservatory, of a circular form, attached to the mansion: others have been erected by commercial gardeners, which will be noticed in another page. In

Baltimore very little has been done the past year. In Washington, the Hon. Mr. Fox, the British minister, has a fine garden, filled with a collection of the choicest annuals and hardy bulbs. At Georgetown, W. Robinson, Esq. is making extensive improvements, and laying out a fine garden. Dr. Wray, of Augusta, Ga., whose collection of plants was formerly one of the best in the southern states, has removed a short distance from the city, where he is laying out an extensive garden. In Cincinnati, there are several neat green-houses; and the collection of *Cacti*, in the possession of Mr. Longstreth, is one of the largest in the country, and contains some large specimens.

LANDSCAPE GARDENING.

Scarcely sufficient has yet been accomplished in landscape gardening, in this country, to convey any idea of what the art consists; a few specimens of well laid out gardens may be seen, but the embellishments of our country residences are not entitled to the rank of landscape gardening. We are not without hope, however, that some wealthy proprietors may be induced to attempt the introduction of an art which would so highly beautify their grounds. Could the service of professional men be secured, and had we not to rely almost wholly upon books for information, it is probable that more advancement would have been made in this department. We are pleased, in stating that a work, by our correspondent, Mr. Downing, is now passing through the press, mostly devoted to landscape gardening, which will be of great assistance to every individual who has a desire to enrich his grounds. It will contain numerous engravings, illustrating different methods of laying out residences after the English style. Mr. Arnold, of New Bedford, whose grounds we have already noticed, (Vol. VI., p. 362,) has a garden laid out with much taste, and we shall endeavor to offer a detailed account of it, accompanied with engravings: it is a nearer approach to landscape gardening than any thing we have ever seen. Mr. Downing has erected an elegant mansion, in the Elizabethian style, at his nursery, at Newburgh, N. Y., and an engraving of this we may promise during the present volume. Mr. Cushing has not yet completed his new house, but when finished, and the grounds put in order, it will be one of the most splendid private residences in the vicinity of Boston.

ARBORICULTURE.

It is not to be expected that a country covering such a great range of territory, and abounding in natural timber plantations, of such vast extent, would give that attention to the cultivation of trees that has been done in Great Britain; where the resources for timber are so scanty, that it has become an object of importance to protect the existing forests, and to plant extensively, for the supply of the navy; and where the scarcity of shade trees is so much felt, that it is one of the first operations, when laying out a new residence, to plant largely. The practice, in this country, has been to cut away, rather than to plant out, and this passion has been carried so far, that now, when there is a desire to possess trees, recourse must be had to planting, to supply this want. The taste for ornamental trees is gradually extending, and the introduction of hardy kinds has been commenced, for the purpose of extending the variety, and furnishing such as possess the charm of novelty, from their not being native species. The formation of arboretums, which has become so popular in England, for the purpose of studying the habits and natural affinities of trees, it is not expected will take place here at present, to any extent; we hope, however, to see a few specimens where the public may acquire a taste for trees, and, in time, to find every gentleman's grounds, of any size, with its complete arboretum. In the Harmony Grove Cemetery, at Salem, an arboretum has been commenced, and we are anxious to see it completed.

Very few of our native trees and shrubs, which are so much prized in Europe, are known to our nurserymen or cultivators. We may instance the genus *Crataegus*, of which there are thirty or forty species and varieties, all of which have been sent to England, and are there so much esteemed, that they are selling rapidly at high prices. *Torreya taxifolia*, a new evergreen, described in Torrey and Gray's *Flora of North America*, has been introduced from Florida, where it is a fine, stately tree, forming a pyramid of green, fifty feet high; and our correspondent, Mr. Downing, has sent a living specimen to Mr. Loudon. It will probably prove hardy in the climate of Britain, and will, consequently, become a desirable tree to all possessors of arboretums or pinetums. The *Shepherdia argentea*, from the beauty of the tree, and the

excellence of the fruit after being exposed to several frosts, is becoming very popular, and has been extensively planted. The Osage orange (*Maclura aurantiaca*,) is now under experiment as a hedge plant, at Mr. Cushing's, but it will not be exposed to the winter, till it acquires more age: if it should eventually prove hardy, by a constant course of heading down and protecting for a few years, till the stems become very woody, it will be the most important plant that has been introduced into New England.

PUBLIC GARDENS.

No other instance of the formation of a Public Garden has come to our knowledge, except the one in Boston. Since last year, improvements have been made in the open ground, and a great variety of shrubs and herbaceous plants have been set out: some few trees have also been planted. The principal attractions, the past year, were the tulips and dahlias. In the conservatory, the plants are flourishing, though, as we long ago expressed ourselves, not so well as they would do in a house better adapted to their growth. The whole is now under the superintendence of an excellent gardener, lately from the London Horticultural Society's garden, at Chiswick, and another year, we shall expect to see many improvements introduced. The number of visitors has not been so great as was anticipated, but this has arisen from various causes, which, we trust, will no longer prevent the public from taking a greater interest in such enjoyments as an inspection of the garden affords.

COMMERCIAL GARDENS.

Commercial gardening is not in that flourishing state which its friends could wish to see it; there has been a gradual increase of nurseries and flower gardens, but the public taste has not been sufficient to afford that encouragement which the numerous establishments expected, and with which the labors of the proprietors deserve to be rewarded. They look forward, however, to better times, and, meanwhile, are preparing an abundant stock, to enable them to supply the wants of the community with whatever they may wish. The progress of gardening cannot be better estimated than by the steady and uninterrupted sale of the commercial gardener's stock, for,

when that is taken up, it is a sure sign that those already engaged in the pursuit of horticulture or floriculture are enlarging and extending their collections, or, that others are engaging in such honorable and pleasing occupations.

The trade in the *Morus multicaulis*, which last year attracted too much of the attention of commercial gardeners, died away more speedily than was anticipated: the inflated prices to which the trees attained, and which it was confidently expected the whole stock would command, fell so suddenly that it proved a losing business to those who had entered into it too largely. The trees were sold, in some instances, for a few cents each, and thousands, if not millions, were never replanted, after they had been taken out of the ground in the fall of 1839. Many who had the land, replanted the trees, and fed the worms with the leaves: others set them out, not wishing to see so valuable a tree, as it will eventually prove, destroyed; while a greater portion of private cultivators, or rather speculators, sold their trees like so much brush. It was not possible that a plant so rapidly increased as the *Morus multicaulis*, should command such high prices for any length of time; but the great object of disseminating the trees was more speedily accomplished from this very cause, and there is not probably a state in the union, where it may not be found growing. If individuals have been sufferers, the country has been benefited at their expense.

Around Boston, there has been but a barely perceptible improvement: the demand for trees was greater than in 1839, but yet not extensive. Pear trees have been more sought after than other kinds. Mr. W. Kenrick is now absent in England, and will probably send home a variety of new fruits and shrubs. The nurseries of Messrs. Winship, Kenrick, Manning, and others, are now very well stocked. Mr. Manning supplies scions of all the kinds in his possession; not having been able to supply the numerous orders for many of the new pears, he has been induced to do this, that the fine varieties might be more rapidly extended. The green-house, grapery, &c., occupied by Mr. McCullough, was consumed by fire, the latter part of November, and his whole collection destroyed. This will be a severe loss to him, and we are glad to learn that his friends have collected a handsome sum, which will enable him to commence again.

In New York, we have but little information concerning the state of commercial gardening, but, from what we have been

able to learn, it is not very flourishing. Mr. Thorburn has been unfortunate in having his extensive collection of camelias destroyed by fire, and he is now absent in England, for the purpose of replacing in part, his stock. He had made many alterations and improvements in his green-house, &c. Our correspondent, Mr. Dunlap, has established a nursery at Harlem. At Rochester, Messrs. Ellwanger & Barry have made large improvements; the past fall they have erected, in their nursery ground, a green-house sixty-four feet long and eighteen feet wide; and a hot-house forty-six feet long and fifteen feet wide, and have added a large number of plants to their collection, which is now very good. They have seven acres under nursery cultivation. The location is a beautiful one, near the Cemetery, about a mile from the city.

Commercial gardening has continued more prosperous in Philadelphia, than in New York or Boston, if we may judge from the fact that several individuals have entered into the business, and those already established have increased their facilities for supplying plants. Mr. A. Ritchie has erected a range of houses, one hundred and twenty feet long, at Kensington; and Mr. Francis Bell, formerly with Mr. Buist, has built a green-house in Twelfth street. Three or four extensive grape-houses have also been erected, for the cultivation of grapes for the market. The old Bartram Botanic Garden, so long celebrated for its fine collection of plants, has lately been improved; Col. Carr, the proprietor, having associated with him Messrs. McAvoy & Gale.

From Washington we have no other information than may be learnt from the report of the horticultural exhibition in the December number of our last volume.

CEMETERIES.

No better evidence is needed to show the interest that the public take in rural improvement, than the establishment of cemeteries in various parts of the country. Boston, New York, Philadelphia, and Baltimore, each have large and beautiful spots laid out as cemeteries, and many large towns have also selected such desirable places of burial. Our remarks, last year, included a notice of the Greenwood Cemetery of New York, and those at Salem, Mass., and Rochester, N. Y.: since then, others have been laid out, and opened for burial. In our remarks upon gardening in Worcester, (Vol. VI., p. 407,) we

noticed the cemetery in that town. In Taunton, a pretty place has been appropriated to the purpose.

The sale of lots in Mount Auburn has not been so large as in 1839: improvements, however, have been made upon those which have been purchased, and several monuments erected. The grounds are kept in excellent order, under the superintendence of our correspondent, Mr. Russell, and many of the lots have been ornamented in excellent taste, under his direction. It is our intention to give some account, in the course of this volume, of the lots which have been purchased and improved since Mount Auburn was first purchased, with a ground plan of the whole place.

Our correspondent in Rochester informs us that a neat plain fence and entrance gate have lately been erected in front of the Mount Hope Cemetery, in that place, which adds greatly to its appearance. The proprietors of lots continue to ornament them with shrubbery, and other improvements are gradually being made. He remarks, that a great deal of inferior taste and skill has been evinced, in the laying out of the walks and avenues, grading, &c. If the citizens of Rochester had engaged the services of a skilful practical man to superintend Mount Hope, they would have a cemetery hardly to be surpassed by any in the world; but this they have neglected.

GARDEN LITERATURE.

Relating to horticulture, the only new work of the year was a small volume, by Mr. Tesclemacher, which has been noticed by us, (Vol. VI., p. 261,) entitled *A concise application of the Principles of Structural Botany to Horticulture*. New editions have, however, appeared, of Bridgeman's *Gardener's Assistant*, and *The Florist's Guide*. A monthly magazine, published in Cincinnati, Ohio, called the *Western Farmer and Gardener*, the second volume of which commenced in October, is partially devoted to horticultural information. In botany, parts III. and IV. of Torrey and Gray's *Flora of North America* have appeared. Some excellent botanical papers have also been published in the *Boston Journal of Natural History*. In agriculture, the *Third Report of the Agriculture of Massachusetts* has been published. The *American Farmer's Companion*, by the late Judge Buel, appeared just at the time our last retrospective view of horti-

culture was made. The *Cultivator's Almanac*, for 1841, *Weeks on Bees*, an excellent work, and the *American Swine Breeder*, have been published. The agricultural periodicals have been improved. The *Cultivator*, at Albany, has sustained its reputation, in its change of editors; and the *New Genesee Farmer*, at Rochester, and the *Farmer's Cabinet*, at Philadelphia, are each valuable aids to the enterprising farmer.

It was our intention to add some remarks upon the progress of gardening in England, and on the continent, but this will be learned, from time to time, in our foreign notices, which embrace every thing of importance that transpires. Necessarily imperfect as the remarks we have made must be, we hope they will serve to show how fast gardening has advanced; another year, we trust we may be enabled to give a more encouraging account of what has been accomplished.

ART. II. *Horticulture in Western New York.*

By M. B. BATEHAM.

It is now two years since my report was given in the *Magazine*, respecting horticulture in western New York; and, although we cannot boast of any great advancement, we are unwilling that old Genesee should be quite forgotten in your annual retrospect of gardening. A few years ago, it was thought that this section of country would make rapid progress in scientific and ornamental horticulture; but a cloud of adversity came over our prospects, and we were compelled to confine our attention to the *necessaries*, and neglect the *luxuries* of life. It is believed, however, that a brighter day begins to dawn, and prosperity will again smile upon us; so that we still hope to see this fertile region become as celebrated for its attainments in horticulture as it now is for its natural advantages.

My time and space, at this time, will only allow me to glance at a few of the principal gardens, and I shall confine my remarks to those which have green-houses.

At Rochester, the green-house and nursery establishment,

commenced in 1834, by Reynolds & Bateham, is now owned by Messrs. Ellwanger & Barry, who have removed it a little out of the city, near Mount Hope Cemetery, where they have purchased a fine piece of ground, and erected a good green-house and hot-house, which are already well stocked with plants. Mr. Ellwanger has imported some fine plants, mostly Cactæ and camellias, from his native country, Germany. They are making arrangements for planting an extensive nursery, and if industry and skill will insure success, these young men will surely succeed.

The nursery of Mr. Asa Rowe, six miles from Rochester, is the oldest and most extensive in this vicinity. Mr. Rowe has a large green-house, and a good collection of common plants, but, owing to the small demand for rare plants, he has not added many to his assortment, of late. His attention is mainly bestowed on the growing of fruit trees, of which his sales have been extensive.

Mr. William King has erected a small green-house in the city, the past summer, and made a good beginning, all things considered.

Rochester cannot yet boast of one private green-house, although many families cultivate plants in their parlors. Mr. J. O. Smith, a gentleman of wealth and taste, is now erecting a fine dwelling-house, and intends building a conservatory next year; when that is done, others will doubtless follow his example.

Mount Hope Cemetery deserves, at least, a passing notice. Many improvements have been made there the past year, and in summer it is a place of great beauty; but *now*, it is desolate and gloomy, and so it will ever be, during more than half of the year, unless our citizens take example from your own Mount Auburn, and intersperse it liberally with *evergreens*, a kind of ornament of which we are sadly deficient.

At Buffalo, there is no perceptible improvement. H. Pratt, Esq., the great patron of horticulture, died last spring, and the improvements which he had projected and commenced, have been discontinued and neglected. His stately mansion is unfinished and unoccupied—and the garden, and fine range of horticultural buildings, give evidence of the loss of that master spirit, of whose taste and liberality they are now the sad monuments.

The nursery establishments of Messrs. B. Hodge, Jr., and A. Bryant, appear in a thriving condition. They both have

green-houses attached, but complain that the sale of plants is quite limited.

The good people of Buffalo are fond of display, and take great pride in building large and costly houses, but do not seem to regard horticultural embellishment, and, consequently, they waste their wealth without producing the anticipated effect. If they studied the matter aright, they might save thousands of dollars, and, at the same time, display far more real taste and beauty about their dwellings.

At Batavia, the garden and green-house of D. E. Evans, Esq., is, as usual, kept in good order, by Mr. Logan, the gardener. This is one of the oldest gardens in this region. The collection of fruit, &c., is of the very best description, but the assortment of plants is rather ordinary, not having enough of new and rare kinds to make it interesting.

At Genesee, a green-house and grapery was erected the past year, at the beautiful residence of the venerable James Wadsworth, Esq. The green-house was erected for the gratification of Miss Wadsworth, who has a fine taste for botany and floriculture, and has already obtained a good assortment of plants, including some rare kinds. With her good taste and ample means, it may reasonably be expected that her collection of plants will, in a few years, be superior to any in this section of country.

At Canandaigua, the green-house of John Greig, Esq. is in excellent condition. The plants are mostly of common kinds, but many of them are very large and beautiful. A striped agave (*Agave americana* var. *variegata*,) is the largest of the kind that I have ever seen, and Mr. Greig says he intends to take measures to bring it into flower, if possible.

Capt. S. Menteath, residing near Canandaigua, sent some very beautiful oranges and lemons, of his own raising, to the fair at Rochester, in October, but I have not had an opportunity to visit his house, or obtain information respecting his plants.

There have been no horticultural exhibitions in western New York, this fall, except in connection with the agricultural fairs. We hope to give a better account of Rochester, next year.

M. B. BATEHAM.

Rochester Seed Store, Dec. 21, 1840.

Our acknowledgements are due to Mr. Bateham for the information contained in the above article.—*Ed.*

ART. III. *Method of preventing the Canker Worm Grub, and other Insects, from climbing Fruit trees.* Communicated by W., Cambridge, Mass.

I SEND you an extract from a late English paper. It seems well worthy of attention, and may very possibly furnish a better antidote to the *canker worm*, than has yet been discovered. It will be necessary to make the bands broader and larger than is proposed in the paper below, and to use a much larger quantity of the preparation. If, as the discoverer asserts, the substance retains its viscosity for a considerable length of time, it will doubtless be found much less troublesome and expensive than tar. Some experiments I have made, promise well. Care must be taken not to burn the India rubber in the house, as an exceedingly fine dust is produced, which spreads throughout the room.

To prevent insects from climbing up fruit trees.—At a late meeting of the Entomological Society, Mr. J. H. Fennell communicated the following successful mode of preventing insects ascending the trunks of fruit trees:—Let a piece of India rubber be burnt over a gallipot, into which it will gradually drop in the condition of a thick viscid juice, which state, it appears, it will always retain; for Mr. Fennell has, at the present time, some which has been melted more than a year, and has been exposed to all weathers, without undergoing the slightest change. Having melted the India rubber, let a piece of cord or worsted be smeared with it, and then tied several times round the trunk. The melted substance is so very sticky, that the insects will be prevented, and generally captured, in their attempts to pass over it. A small quantity of India rubber is sufficient for the protection of twenty ordinary sized fruit trees.—*W., Cambridge, Dec., 1840.*

We would recommend a trial of the above plan to our friends who have trees which have suffered, or are likely to suffer, from the depredations of the canker worm. It has always appeared to us, that the application of tar, on a band of cloth around the tree, was a safer and surer method of preventing the canker worm grub from ascending the stem, than the *patent* troughs, so styled, and we are supported in our opinion, by the testimony of several gentlemen who have tried

the latter, and found them not to answer the purpose, unless very carefully attended. If, therefore, the preparation of India rubber, noticed above, will retain its viscosity, or stickiness, a great length of time, so as to take the place of tar, the frequent application of which is attended with considerable trouble, and often forgotten, it will undoubtedly be an important discovery. From the information furnished by our correspondent, in relation to this subject, and the favorable character of the experiments which he states he has already made with the above substance, we do not hesitate to recommend the plan for general trial. We shall be happy to hear further from our correspondent, and the result of his experiments for the season.—*Ed.*

ART. IV. *On the cultivation of the Dahlia.*

By T. DUNLAP, Harlem, N. Y.

AGREEABLY to your desire, I send you a few remarks on the cultivation of the dahlia; and, if you deem them of interest to your readers, you may insert them in your valuable Magazine.

This much esteemed flower, having been for years a great favorite of mine, I have perhaps devoted more time to its cultivation, and had opportunities of seeing it planted in a greater variety of soils and situations than the majority of your readers; therefore, without hesitation, I give you the result of my experience.

I have invariably found the best general bloom upon those roots which were planted upon a moderately rich, sandy loam, in a cool situation, (if a clay bottom, so much the more favorable,) as in hot and dry seasons they do not suffer so much from drought, as those planted upon a gravelly or sandy bottom.

Planting the roots upon a proper soil, near the margin of a river, or other large body of water, seems to me the best adapted to ensure a perfect bloom of this exquisitely formed flower, as the continual evaporation from the surface, in warm

weather, produces a humidity in the atmosphere, much more congenial to the nature of the plant than can be accomplished by any artificial means.*

I admit that cultivators may obtain some very good flowers from plantations made upon a dry, sandy soil, but neither will the flowers be as abundant, or as large, as those upon plants growing on the favorable location just noticed; and, if planted upon a strong, rich soil, the cultivator will have a much more vigorous growth of plants, but with a diminished quantity of good blooms.

These remarks will not apply to the striped and mottled varieties, so far as regards the soil. An experiment which I have tried the past summer, with that novel variety, *Striata formosissima*, leads me to the conclusion, that to bring out the colors, the plants will do better upon a poorer gravelly soil, than elsewhere. The experiment was as follows:—

No. 1, I planted in poor, gravelly soil, in an open situation, and all the flowers but two were beautifully mottled.

No. 2, I planted upon a soil, as first recommended above, and not one half of the flowers were mottled.

No. 3. Three plants, very highly enriched, and every bloom but one was *self-colored*. [The same results have attended our own cultivation of the *Striata formosissima*.—*Ed.*]

Respectfully yours,

T. DUNLAP.

Harlem, N. Y., Nov. 10, 1840.

* Of this, we think, there can be no doubt. Mr. Thorburn, of New York, whose garden is situated at Astoria, L. I., nearly opposite Hurlgate, immediately upon the East river, running to within twenty feet of the water, has not failed, for several years, to produce an abundant bloom; while cultivators in the interior, at Jamaica, and at Brooklyn, and other places, have been unable to obtain a hundred flowers from the same number of plants. But, as it is impossible for most cultivators to avail themselves of such a situation, the best means must be adopted for procuring flowers in such soil and situations as those who are admirers of the dahlia, possess. This will undoubtedly be best effected by planting in the best soil and most favorable aspect that the garden affords. If the soil is sandy, it should be well trenched, in order that it may retain moisture a greater length of time, and allow the roots to penetrate more readily to a greater depth, which will enable the plants to withstand drought. When the extent of a garden will allow of the choice of such a locality as Mr. Dunlap recommends, it should at once be selected.—*Ed.*

ART. V. *Pillars of Roses.*

By the EDITOR.

A FEW years since, but a small number of fine roses were to be found in our gardens; within a short period, however, the taste for this beautiful flower has been gradually extending, and some cultivators have now in their collections more than five hundred of the most elegant kinds to be procured of the Paris or London nurserymen. Since the production of hybrids, the varieties have been most rapidly increased, and many of them are surpassingly fine; and it is gratifying to find such a large number introduced.

The climbing or running roses have not been so much esteemed as the dwarf kinds, unless we except the old Bour-sault; at least, they have not very generally been planted; but this has undoubtedly arisen from the rambling character of their growth, too luxuriant and spreading to be kept within reasonable bounds, and, therefore, only wanted when the object has been to cover an arbor or trellis, or hide some old wall. But English fanciers of the rose, always striving to form some new and pleasing object, have introduced the running roses, with the most happy effect, into their gardens, and have given this class a new claim upon the attention of cultivators.

Some years ago, Mr. Rivers, Jr., nurseryman, of Saw-bridgeworth, and a great cultivator and admirer of roses, in a communication in the *Gardener's Magazine*, made some remarks upon the method of planting so as to form pillars of roses: the plan seemed to us one which might produce a pretty effect, but we did not think of it again until we saw another notice of a similar plan, in Paxton's *Magazine of Botany*, accompanied with an engraving. It then appeared to us that it might be introduced into our gardens, and by its novelty, as well as beauty, prove an interesting and desirable feature.

The plan consists in nothing more than training the branches to iron rods, or trellis work, made in the shape of a pyramid, from eight to sixteen feet high, so that the whole may be completely covered with foliage and flowers: when in full bloom, and composed of different colored flowers, it must present a truly beautiful object.

In order to convey to our readers some idea of the plan, we have copied, from the last named work above, the annexed



engraving, (*fig. 1.*) representing roses trained to iron rods. The design is fanciful, and somewhat expensive, but we have not varied the engraving, as some cultivators may prefer such, and when the expense is no object, they certainly would have a lighter appearance. But wooden trellises, neatly made of well seasoned oak or larch, and thoroughly painted, will answer every purpose.

The following is the description of this design:—"The central pillar, with the brackets, are made of cast iron. The letter *a* shows the centre pillar, sunk a sufficient depth into a large stone, or block of wood, so as to hold it fast; of the two, stone is preferable, as being more durable, and better calculated to secure it against rough winds, &c. *c c c* refer to the brackets, which fasten the uprights *b b b*. Through these uprights, pass rods of iron, for the purpose of tying the branches to. The whole should be painted three times over, with paint of a blackish color, [bronze green,]

which will secure it against rain, and prevent corrosion at the joints for many years. At the bottom of the pillar, *d*, may be placed a few large rough stones, which will have the appearance of rock-work, and add much to the picturesque beauty of the whole; they will also prevent the soil from becoming dry about the roots, thus assisting them to grow with more freedom."

An alteration of this plan might be made in the following manner, which would lessen the expense, without but slightly

diminishing its beauty. The central column might be made of oak; if desirable, it might be turned to represent the iron column above; it should be set firmly into the ground; to this, wrought iron brackets, of the scroll shape, or some other fanciful form, might be fastened, and to these, the upright iron rods could be attached. Perhaps large iron wire, neatly adjusted to the rods, might answer the purpose of cross bars which would prevent the necessity of drilling the uprights, for the purpose of passing the cross bars through. The upright rods form a triangle, and should be placed about two feet apart on the side at the base.

2

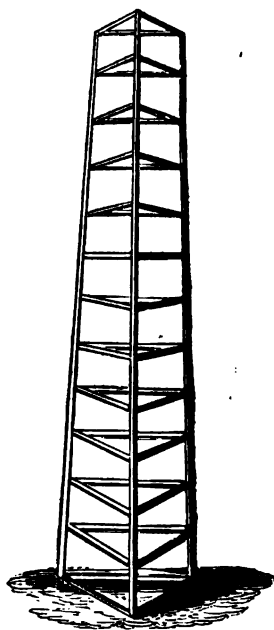


Fig. 2 represents a wooden trellis, of the kind referred to above, and which will answer in the place of iron, as the foliage and flowers will almost wholly screen it from view. It is made of three strong, square rods, standing in a triangular manner, with cross bars, which are let into the rods with a small mortice, and to which the branches are to be trained. It should have three good coats of green paint. A very rough article may be made, by merely nailing the bars to the upright rods, instead of letting them in with a mortice.

Roses may be cultivated in almost any soil. Mr. Rivers, whose remarks we have noticed above, states that "merely to show how a heap of clay may become a mount of beauty, he levelled and made circular a large quantity of white and blue clay, dug from a pit to contain water; on this, with a small portion of dung and sand to each plant, he planted some of all the hardy climbing roses. The effect was beautiful, the second season; and another summer, it would be a mount of rose pillars, each from eight to ten feet high."

Our correspondent, T. Lee, Esq., of Brookline, has had considerable experience in the cultivation of climbing roses,

and probably possesses as good a collection as is to be found in the vicinity of Boston. He has the red and white Boursault, double Ayrshire, Bourbon, rubifolia, and the Michigan or Detroit rose, growing in different aspects and various situations upon his grounds: some are trained to the wall of the house, and others are growing upon trellises, and he is rewarded by a profusion of their elegant blossoms. We hope, another year, that Mr. Lee, who is a great fancier of roses, and who cultivates them well, will try the method of growing them we have now described: a few examples of the kind would soon be followed by others, and such pillars would form most picturesque objects in garden scenery.

The kinds of roses we would recommend, when the object is to form a variety of colors, are the old Boursault (crimson,) the double Ayrshire (pale blush,) and the white Boursault (white.) When the object is to form masses of one color, the old Boursault and the *new* crimson Boursault may be planted; but the colors may be varied according to the fancy of the cultivator. Many other kinds may be planted with equal effect: but the above, being the most common as well as most showy sorts, and such as may be procured at reasonable prices, we have recommended them for trial. One plant for each rod would answer, but six roses of different colors might be planted if desired, to form a greater variety.

Mr. Rivers, in his catalogue, enumerates fifty-three sorts of climbing roses, of which number, nine are varieties of the Boursault, and fourteen of the Ayrshire. All of these are most vigorous growers, often making shoots from nine to fifteen feet long in one season, and soon clothing a trellis with their branches. Some of the beautiful hybrids may also be planted for this purpose, as several of them make long and flexible shoots, and are well adapted for training up to a trellis. Two of the number are Rivers's George IV., and the Pourpre panaché; the former a magnificent variety, with rich dark velvet, globular blossoms. Some of the Noisette roses are hardy, and, with their great clusters of flowers, make a beautiful show. All who desire to introduce this method of growing roses into their gardens, will find a sufficient number of varieties in our nurseries to select from; and, as newer kinds are introduced, they may be planted in the place of the older sorts.

ART. VI. Floricultural and Botanical Notices of new Plants figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

Floricultural and Botanical Intelligence.—*The Lichens of New England.*—No. III., Vol. III. of the *Boston Journal of Natural History*, lately published, contains an article entitled "A further Enumeration of some New England Lichens," by E. Tuckerman, Jr., LL. B. It is a valuable contribution to the cryptogamic flora of this country, and has evidently been prepared with great labor. It is desirable that a complete synopsis of our New England species should be made, in order to facilitate the study of the tribe. Mr. Tuckerman has been indefatigable in his exertions, and has done much towards accomplishing so important an object.

New seedling Pansies.—Our friend and correspondent, Mr. Walker, of Roxbury, has sent us, for inspection, a new seedling pansy, which he thinks one of the best he has ever grown, and which opinion we most heartily second. The flower is exceedingly large, the upper petals dark purple, and the lower ones deeply marked with the same color, on a yellow ground. It is nearly hemispherical in its form, the colors clear and brilliant, the eye neatly formed, and the whole flower flat on the surface. The following note, from Mr. Walker, accompanied the flower:—

"Sir:—I herewith send you a specimen of one of my new seedling *Viola grandiflora*. I have named it *Sophia Helen*, and am of opinion it is one of the best, if not the best, I ever raised. But sir, I am aware how apt florists are, like mothers, to estimate their 'little jewels' as the 'greatest beauties,' when

others oftentimes think otherwise. I have therefore thought it might be well to submit it to your inspection and judgment.—*I am, sir, yours, &c., S. Walker, Roxbury, Dec. 15, 1840.*”

Mr. Walker has been highly successful in the cultivation of the pansy, and has raised a great number of superb flowers, which have heretofore been noticed in our pages. Among the number, we may instance Othello, Mrs. Cushing, and Vulcan, as the finest. These have, however, we believe, with many more, been lost to collections, and Mr. Walker has not himself perpetuated them; but we trust this will not be the case with the Sophia Helen: it should be in the possession of every admirer of this humble, but elegant tribe, and, unless others are more fortunate in the production of fine seedlings, than Mr. Walker, it will be some time before it will be surpassed.—*Ed.*

New seedling Camellia.—Already our collections contain a large number of superb seedlings, of American origin, and if the same success attends the labors of cultivators, they bid fair to rival, in the magnificence of the flowers, the finest varieties which have ever yet been produced. Flöyi, Lándrethi, Práttii, E'stheri, americana, Washingtonia, and numerous others, have no superiors among the many varieties which have been raised in England and on the Continent. And, if so many fine ones have already been produced, what may we not expect when the thousands of seedlings, now in the possession of cultivators, come into flower? If one in a thousand should prove to be equal to the flower we are about to notice, we shall bear the palm away, even from the Chinese.

Our correspondent, Col. Wilder, whose excellent articles on the camellia have appeared in our past volumes, and which are not yet completed, attempted the growth of seedlings soon after he began to cultivate the camellia, in 1833. In 1836 he planted several seeds. The plants from which they were then saved, were the single red and warratah, which were impregnated with the fine double sorts. When Mr. Wilder disposed of his collection to the Public Garden, the seedlings were all reserved. This season some of them have come into bloom, and one among the number has proved a superb variety. The plant is one of seven which were raised, from one pod of seed, from the *old single red*, impregnated with punctata. The foliage of four of the plants very much resemble each other; the other three are more distinct. From the promising appearance of the plants, they were well encour-

aged in their growth the three first years, and then they were checked by confining their roots to rather small pots, to throw them into flower as soon as possible. One of them has flowered, and three or four more have produced buds, which will expand in a few weeks.

The flower, on the plant which blossomed, is, without hesitation, one of very great beauty. The color is a clear, deep rose; the flower very regular in its formation, a complete circle in the outline, about four inches in diameter, and filled entirely to the centre: the petals are slightly cupped, arranged in the most symmetrical manner, perfectly rose-edged, excelling in this respect, the old double white. The flower it most resembles is the *Lándrethi*, but it surpasses even that superb variety, in the color, which is purer, and in its more regular shape. The foliage resembles *Lándrethi*, and the growth of the plant is robust and vigorous, with a neat and upright habit. Mr. Wilder has been fortunate in raising such a beautiful flower, and, although he is well known to all amateurs and lovers of the camellia, as one of its most enthusiastic admirers and cultivators, we hope he will give it his own name, in preference to any other.

Ipomæa rubro cærùlea is now in flower, in the hot-house at the Public Garden. It is a showy species, with blue flowers, somewhat resembling the morning glory, but more than twice as large: it is of free growth, and an abundant bloomer. It may be grown with success in the open air, as we have before stated, (Vol. II., p. 389.) The colors of the flowers are much more brilliant in the open air, than in the hot-house.

Iconography of the genus Camellia.—The first four numbers of this work, a notice of which has been given by us, (Vol. V., p. 287,) have already appeared, and contain figures and descriptions of the following varieties:—*Camellia japonica Derbyana*, *Sweetii vera*, *tricolor*, *Colvillii*, *althææflora*, *picturata*, and *imbricata*, and *C. reticulata*. The drawings are made with great accuracy, and the coloring is highly finished, equal, as regards the flowers, to Chandler & Booth's *Illustrations of the Camellia*; the foliage, being taken under a strong light, is not so well done. The work will prove a valuable guide to amateurs in the selection of new kinds, and will form a handsome ornament for the parlor. It appears in semi-monthly parts, two plates each, at the price of sixty cents each part. The Abbé Berlèse has secured a sufficient number of subscribers to warrant him in proceeding with the work. It

will contain, when completed, from three hundred to four hundred varieties.—*Ed.*

Echinocactus Ottónis.—A plant of this species flowered the first time, with us, in September, 1839. It was imported from Germany the preceding year, and was, at the time of flowering, three years old. It bore but one flower, which expanded about twenty days after it began to protrude from the plant. It was about eleven inches in circumference, without a stem; it had a treble row of recurved petals, of the most beautiful bright straw color, of a lanceolate acuminate form, somewhat serrated at the tips. The stamens were very numerous, as in most of the cactus tribe, and the anthers twelve cleft, rich deep crimson, standing erect above the stamens. It expanded about ten o'clock, A. M., and closed about three, P. M., and kept expanding and closing in this manner for three successive days.

Last summer we had two plants of the same kind flower in July; each plant bore a succession of flowers that lasted for several weeks, having each two to four flowers expanded at the same time. Their dimensions were not so large as the one described above, perhaps in consequence of being more numerous. We would recommend this species to every lover of this interesting genus: it blooms freely and regularly, and well repays the cultivator.

Cereus obtusus.—This species we imported also from Germany two years ago, and at the time of flowering, (July, 1840,) was five years old: it resembles somewhat the *Cereus grandiflora* in appearance. It is of much more vigorous growth, spines brighter, nearly white, color very dark brownish green, with four blunt angles: it is one of the creeping kind, although mentioned in Loudon's *Encyclopedia* as "erect:" it is also night-blooming. It is unnecessary to enter into a minute description of the flower, as it bears a great degree of similarity, in form, size, color, and all its habits, to the *grandiflora*: it was said, by a number of persons who saw both, that the *obtusus* made by far a grander display.

We have a great many new varieties, which we expect to bloom next summer, of which we shall give you due notice.—*Ellwanger & Barry, Rochester, New York, Dec. 1840.*

New Camellias lately introduced.—Since the spring of 1838, there has been but a small number of new varieties of the *camellia* introduced. In the early part of our fifth volume, (p. 25,) we gave a descriptive list of upwards of thirty new varieties,

furnished us by Mr. Wilder, which he had imported at that time. All these plants were disposed of, with the rest of his collection, to the Public Garden, where some of them have since bloomed. Mr. Wilder has now furnished us with the names of a few varieties, which he has lately received from the Abbé Berlèse, of Paris, and M. Rinz, of Frankfort on the Main. None of the plants have yet flowered, although several of them are showing promising buds. From the description of the kinds, under these names, in the *Monograph* of the Abbé Berlèse, the second edition of which has lately been published, it is expected that they will be equal, or superior, to any which have yet been received from France. We shall take an early opportunity to notice the *Monograph* of the Abbé Berlèse, and shall extract all the information which we think interesting to the lovers of this splendid tribe. The following are the names:—

Caméllia japonica squammòsa	C. j. Victòria álba
C. j. Color di lacca	C. j. epsomània rùbra
C. j. warratah tricolor	C. j. Birro
C. j. pictòrum ròseum	C. j. Shubáckii
C. j. ignovoma	C. j. William IV.
C. j. Princess Adelaide of	C. j. Walter Scott
France	C. j. Lady Eleanor Campbell
C. j. elàta nòva	C. j. Emèlie grandiflòra
C. j. fasciculàta venòsa	C. j. celestina
C. j. Duchesse d'Orleans	C. j. splendidíssima álba
C. j. Sophidna	C. j. Palmer's carminea
C. j. claritas	C. j. Beállii
C. j. Lauzeseuridna	C. j. dahliaeflòra ígnea
C. j. Ami Cachet	C. j. spofforthiana cárnea
C. j. Bròwnii	C. j. Pronayàna
C. j. Richárdii	C. j. heteropétala álba
C. j. Mirra	C. j. — rùbra
C. j. Gardeniaeflòra	C. j. Mannéttii

Together with many of the same varieties, which have been before named.—*M. P. Wilder, Hawthorn Grove, Dorchester, Dec., 1840.*

Caméllia japonica var. King, is now in bloom at Mr. Wilder's. It much resembles eclipse, and is a pretty variety, but it falls far short of the description which has been given of it, (Vol. IV., p. 22.) C. ochroleuca, and Palmer's Perfection, will each flower in the course of a week or two.

Camellias in flower this month.—A great number of fine varieties of the camellia will flower this month at the Public Garden, Mr. Wilder's, and at Messrs. Hovey & Co's. As lovers of this splendid family may like to see some of the best, we name the following, which will be in bloom:—

At the Public Garden, *Camellia japonica* var. *eximia*, *Buckliana*, *Fløyi*, punctata, eclipse, *Gilesii*, *Colvillii*, *Greville's* red, delicatissima, picturata, *anemoneflora* álba, *conchiflora* nòva, *Rosa sinensis*, speciosa, *Chandleri*, elegans, &c.

At Mr. Wilder's, *Camellia japonica* var. *ochroleuca*, *celestina*, *spofforthiana* carnea, *Vandesia* carnea, *Donckelaeri* tricolor, álba *Londonensis*, *King*, *Palmer's* Perfection, *Gilesii*, *eximia*, *Colvillii*, *Fordii*, elata, imbricata álba, nobilissima, *Hendersoni*, *Leedna* supérba, conspicua, delicatissima, *Clarissa*, *curvætifolia*, *Grunelli* álba, *Eliza*, rosétta, *Tamponeana*, *Carswelliana*, *Eleanor* Campbell, *Emelie* grandiflora, *Juliana* formosissima nòva, &c.

At Messrs. Hovey & Co., *C. japonica* var. *tricolor*, corallina, elegans, *Fløyi*, imbricata, candidissima, *Gilesii*, *Landrethii*, *althææflora*, ignescens, *Chandleri*, *Rossiana* supérba (fine,) *Colvillii*, conspicua, nobilissima, *Vandesia* supérba, speciosa, *Graya* nòva, *eximia*, *rosa sinensis*, *anemoneflora* álba, and *C. reticulata*, &c.

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

Destruction of insects in the night, by lamps.—The vines of France are infested by an insect called the *Pyrale*, a species of moth; and so injurious are they to the vines, that they often destroy the crop through entire districts. The government of France, deeming the subject one of national importance, engaged the services of Prof. Audouin, of Paris, to make an investigation in regard to the insect, and, at the *séance* of June 14, 1838, he gave an account of his Researches for the Destruction of the *Pyrale*, to the Royal Society of Agriculture of Lyons. This paper has been published in the *Annales des Sciences, Physiques et Naturelles* &c., at Lyons, and from it we gather the following information, as translated in a review of

the work, in the *Gardener's Magazine*. Prof. Audouin, however, will publish a volume upon the subject, under the auspices of the French government. It will be in quarto, with an atlas of twenty-three colored plates, in five or six numbers (or livraisons,) at ten francs each. After giving a history of the insect, and an interesting account of the very singular manner in which the eggs of the female are fecundated, he gives the following mode of destroying the insects.

M. Audouin states that the mode of destroying the insect, which he found most effective, is, to place among the vines, in the night time, lamps enclosed in glass, and suspended over a saucer of oil, or any greasy or viscous matter. The moth flies to the light, which it is prevented from touching by the glass, while, by repeatedly striking against it, in its endeavors to get at the light, it drops down, and is drowned or fixed in the oil or greasy matter. One cultivator, in the year 1837, put down in his vineyard, in one night, two hundred of these lamps, at twenty-five feet apart every way. The lamps burned for about two hours, during which time, an average of one hundred and fifty moths were fixed in each saucer, making, in all, thirty thousand insects. A fifth part of that number of moths consisted of females, each of whom would have laid one hundred and fifty eggs, which, in a few days, would have produced nine hundred thousand caterpillars. August 7th, one hundred and eighty lamps, placed in the same vineyard, and for the same period, caught each eighty moths, making, in all, fourteen thousand insects, three fourths of which were females: but admitting only the half, or seven thousand two hundred females, in multiplying that number by one hundred and fifty, the number of eggs that each female is supposed to lay, the total number of caterpillars destroyed will be one million and eighty thousand. Another mode which M. Audouin recommends is, gathering the leaves or the points of the shoots, immediately after the eggs have been deposited, or when they have been newly hatched. As the eggs are always laid upon the upper surface of the leaf, they are easily detected by women or children. By this process, twenty persons, between the 7th and 11th of August, gathered one hundred and eighty-six thousand nine hundred nests of eggs, and, as each nest contains, at an average, about sixty eggs, the total number destroyed was eleven million two hundred and fourteen thousand.

Upon this, the conductor of the *Gardener's Magazine* remarks, that though the subject is, no doubt, of more interest to the Continental than the British gardener, still, the latter might adopt both the lamp and gathering systems among his cabbages and gooseberries; and we think that our amateurs may also learn something from the experiment tried by M. Audouin. The gooseberry moth might undoubtedly be easily entrapped in this manner, and where there are only a dozen or two of plants, with very little trouble, as two lamps at the most, would be all that would be required, and they need not be lighted more than six or eight nights. Perhaps the curculio, which is so troublesome to the plum, might be caught in the same manner. It is true it is not one of the moth tribe, but, as it flies from branch to branch, attacking the fruit, it would, no doubt, be attracted by the light, and, in its attempts to reach it, fall into the saucer of oil: one lamp suspended in a tree, would be sufficient. We should be glad to see the experiment tried, and we

hope that some of our cultivators who have leisure, will be induced to see with what effect. We think the remarks of M. Audouin are worthy of reflection, and cannot but lead to important results.

M. Audouin is a thorough entomologist, and, in directing his attention to the destruction of insects injurious to agriculture, is accomplishing much more good than in merely studying their classification and nomenclature.—*Ed.*

Viola regia Lindl.—Living plants of this vegetable prodigy, noticed in our Vol. IV., p. 211, have reached Demerara in safety, and may soon be expected in England, probably ere this. That they will prove as capable of cultivation as tropical *Nymphæacæ*, cannot be doubted. (*Bot. Reg. Chronicle, Aug. 1840.*)

A weeping common Oak, (*Quercus pedunculata péndula*,) was found in a bed of seedlings, sown at Ochertyre, Scotland, in 1825. It was planted on the lawn, at Ochertyre House, and is now, (1840,) thirty-three feet high, with regularly drooping branches, which, after they touch the ground, run along it for some distance. Plants of it have been propagated by grafting on stems five or six feet high, which form beautiful weeping trees. (*Gard. Mag.*)

The roots of *Oenothera biennis* L. (*onagre French*,) are eaten in Germany, like those of *scorzoner*, and the points of the shoots may be used in salads. The herbage would form a good forage for cattle, which are very fond of it. (*Annales des Sciences, Physiques, &c.*)

Morus Sericeana, (in compliment to the director of the Botanic Garden of Lyons,) has been raised from seed of the *Morus multi-cadlis*, and is considered preferable to that variety, from its hardiness, and the largeness of its leaves. The fruit is small, and of a dark violet color. (*Id.*)

Gladiolus cardinalis, at Hafton Gardens, the seat of James Hunter, Esq., in Argyleshire, Scotland, measures twenty-three feet in circumference, and exhibits upwards of one hundred stems, terminating in spikes of its rich scarlet flowers. This plant, in common with various others at Hafton, says much for the mildness of climate, and does great credit to the skill and care of the head gardener, Mr. Mc Dermid. (*Glasgow Courier.*)

Pumpkin Sugar.—We find a notice in the *Gardener's Magazine*, of a method of manufacturing sugar from pumpkins, for which a patent has been procured by M. L. Hoffman, of Hungary. M. Hoffman, together with M. Devay, has established a small manufactory of the article in Zamdor, in which they have already obtained forty hundred of sugar from pumpkins, a small part of which they have also refined. One hundred weight of pumpkins yields as much sugar as one hundred weight of beet roots, but the space of a hectare, viz. two acres, one rood, and thirty-five perches, yields three or four times as large a quantity of pumpkins, (according to their weight,) as the beet root: the space occupied by Indian corn growing between the rows not being included, eight hundred weight of sugar could be raised on sixteen hundred square toises, from which two hundred hundred weight of pumpkins is obtained, and sometimes over two hundred and sixty hundred of pumpkins. M. Hoffman has obtained from between twenty-six and twenty-seven hundred weight of pumpkins, one hundred weight of sugar, and as much syrup. In making the sugar, the pumpkins are cut in pieces, and then, with the rind, are

rubbed on a grating, the same as is used for beet root, and the seeds, which produce an excellent oil, are kept separate. One pound of oil is obtained from five pounds of seed. The juice is obtained from the grated pumpkins in the same manner as from beet root. M. Hoffman obtained from an indifferent press, eighty-two pounds of juice, containing a proportion of sugar of from 3° to 10° according to Bauncé. The juice is far preferable to that of beet root, because it does not so soon lose its virtue, but remains good twenty-four hours. It is purified and cleaned by the same process as beet sugar. The pumpkins should be cut up in pieces before they are grated.

This discovery may be of some importance to the agriculture of this country. In the West, where such immense crops of pumpkins may be produced, it will prove more profitable for cultivation than the sugar beet.—*Ed.*

Four new species of the *Gúrria* have been discovered by Mr. Hartney, in Mexico, and plants have been raised of one of them, in the garden of the London Horticultural Society. Dried specimens have been sent to London, of the whole four, from which they have been described by Mr. Bentham, secretary to the Society. Mr. Hartwig has also sent to England seven species of Mexican oaks, figured in Humboldt and Bonpland's work, *Plantæ Equinoctiales*, and in the *Arboretum Britannicum*, Vol. IV., and also two species not yet figured. His discoveries will be of great value, and furnish many fine trees, which will probably endure the climate of England, and thus increase the interest of arboretums. He has also sent home several new and splendid plants; among the number, a brilliant *jacobæa* lily.—*Id.*

ART. II. Domestic Notices.

Russélia júncea.—This truly beautiful plant has been introduced four or five years, but we have never yet seen a good specimen of it in bloom. It is capable of being made one of the most splendid objects our green-houses afford. Mr. Paxton remarks, in a late number of his *Magazine of Botany*, that it is not often seen in full perfection in English gardens, and attributes it to a want of proper knowledge of its cultivation. It requires a light, rich soil, (heath earth and light loam,) plenty of pot room, and a liberal supply of water during its growing season, and it will throw out its long, depending, leafless shoots, which will be wreathed with its elegant tubular blossoms. We hope some of our amateur cultivators, who have the leisure, will try and grow the plants to greater perfection than has yet been attained in our gardens.—*Id.*

Destruction of worms in flower pots.—I have read with much interest the various articles (editorial especially,) in your journal, and I feel convinced that you have done much, very much, towards cre-

ating a taste for horticulture around Boston, and I trust you will receive a substantial proof of the estimation in which your labors are held by a discerning public, in an increase of subscribers to your next volume.

Will you oblige several of your constant readers, by giving us, in your next number, the best and most speedy method of extirpating the worm, (called fish worm,) from the earth in flower pots? Scarce a family can grow a few pots without being more or less troubled; and I think you would confer a benefit on your readers by an article on this subject; at least you will oblige *One Subscriber, Boston, Dec. 26, 1840.*

[We are happy to hear that our labors have been acceptable to our readers: it will always be our endeavor to advance the interests of gardening, as far as we are able to do so. Worms in pots may be easily destroyed, simply by watering the soil with lime-water, which may be made by putting a piece of lime, weighing about two pounds, into a pail of water; when the whole is slaked and well stirred up, it should be allowed to settle. The clear water may then be turned off, and the soil in the pots should be liberally watered with it. The worms will soon leave the premises, by crawling out upon the surface, when they may be taken off and destroyed. If any remain, another watering may be applied. We have never found any difficulty in destroying them by this method.—*Ed.*

Seedling dahlias.—We alluded, a short time since, to Mr. Hancock's new seedling dahlias: since then, we have received a letter from Mr. Hancock, in which he states that he has saved ninety-nine dahlias, selected from about twelve hundred plants, some of which he thinks will equal any thing yet produced in America. If they only hold their goodness, many of them will far eclipse the "Hero of Tippecanoe."—*T. Hancock, Burlington, N. J., Dec. 1840.*

The wild Cherry used as a stock for budding.—A correspondent of the *Albany Cultivator* states that the wild cherry, (*Prunus virginiana*,) is used as a stock for budding, by Mr. Floy, nurseryman, of Harlem, N. Y. Mr. Floy had two or three rows of the stocks budded with plums last year, (1839,) by way of experiment, and with what appeared tolerable success, half or two thirds of them having taken: they were doing well, having made shoots averaging two feet long, (then June last,) of most luxuriant and thrifty appearance. We should be glad to learn from Mr. Floy how well the experiment succeeds, and whether he thinks the cherry stock may be used to advantage in budding the plum. The trees may grow well for a year or two, but it remains to be seen whether they will continue to show the same luxuriance, or whether the crops will be as abundant and good as on the common plum, *Prunus domestica*, or the beach plum, *P. maritima*, though we are not aware that the latter has ever been tried as a stock.—*Ed.*

Preservation of apples.—At the late exhibition of the New Haven County Agricultural Society, in October last, Mr. Augustus Foote, of Bradford, Conn., presented some apples of the growth of the year previous, 1839; they were greatly admired by all who saw them, both for their beauty and their remarkable state of preservation. A correspondent of the *Farmer's Gazette* was desirous of learning of Mr. Foote, the method by which he was enabled to preserve them to such

a late period of the year. To this query, Mr. Foote replies, that the apples were kept without any extraordinary labor or pains on his part. He puts them in an uncovered bin in his cellar, which is made secure from frost. In the spring, instead of opening his cellar, and admitting the fresh air, as is usually the case, he keeps it closed tight, as in winter. The consequence is, that his apples keep sound throughout the summer. The apples which Mr. Foote exhibited, were called "Everlastings," but he thinks any good winter apple may be preserved in equally as good condition if the same attention is observed. Mr. Foote thinks that the admission of fresh air in spring is the sole cause of their decay.—*Ed.*

Dr. G. Watson, our friend and correspondent, of Philadelphia, has been chosen corresponding secretary of the Botanical Societies of London and Edinburgh, and is engaged in collecting specimens of American plants, and arranging them in herbariums, for the two societies. He has already sent to England several species.—*Ed.*

To destroy cabbage worms.—A correspondent of the *Southern Cultivator* states, that he had a square of very fine cabbages in his garden, upon which the worms had commenced making great ravages. Pennyroyal was gathered, and scattered over the cabbage heads plentifully, and the work of destruction ceased. The writer did not know whether the method was a new one, or not; but, as it seems to have been an effectual one, it might be recommended for trial. Quere? What kind of cabbage worms are cultivators at the south troubled with, that do any material damage to cabbages, after they have headed up?—*Id.*

Mrs. Perrine, the widow of our correspondent, the late Dr. Perrine, who, it will be recollected, was killed by the Indians, at Indian Key, Fa., last August, has sent a memorial to Congress, praying for a tract of land and relief from government. Mrs. Perrine, with her two daughters and son, miraculously escaped the fate of her lamented husband. His house was destroyed, and, with it, his valuable collection of tropical specimens of plants, his library, and all his writings. Mrs. Perrine is now thrown upon the world, with a family, and without any thing for support, and we hope that Congress will grant her petition. The labors of Dr. Perrine fully entitle his wife and children to a liberal reward from government, and those who know the services he has rendered in the cause of agriculture, will step forward and plead in behalf of his afflicted family. We would call upon the editors of all our agricultural journals, to speak in behalf of Mrs. Perrine.

Since the death of Dr. Perrine, we have received four letters, written by him, and forwarded to us by the way of Ohio: they were dated in February last, and did not reach us till November. They contain a variety of intelligence relative to the introduction of tropical plants, and the progress of the Tropical Plant Co.; and, as we trust the interest, which the indefatigable labors of Dr. Perrine have created in relation to the subject, will not die away, we shall, at a convenient opportunity, extract some of the most interesting portions of his communications.—*Id.*

Enkiánthus quinqueflorus.—Probably the only plant which has ever flowered in this country is now coming superbly into bloom, at the country residence of Col. T. H. Perkins, at Brookline. It has

flowered every season, for several years, and it is well worth seeing, by every lover of plants.—*Ed.*

Ipomœa Horsfalliæ is now flowering profusely at Mr. Cushing's, Watertown; its large, deep crimson blossoms in immense clusters, depending from the shoots, which are trained on the back wall and over the walk, presenting one of the most gorgeous displays. It should be in every collection of hot-house plants.—*Id.*

Eutœa viscida.—This beautiful annual, with many others, is now in bloom, at the conservatory of T. Lee, Esq., in Brookline. Mr. Lee is a great lover of those kinds of annuals which bear pot cultivation, and flower freely during winter: he has great success in cultivating them, and does not fail to produce flowers nearly the whole year round.—*Id.*

Abridged Catalogue of Fruits, Dahlias, &c., cultivated by MM. Lefevre, pere & fils, Montefontaine, near Paris.—M. A. Lefevre has sent us several catalogues, containing an abridged list of many of the best pears and other fruits grown in their extensive nursery in France, for whom M. Lander & fils, William street, New York, are agents. The catalogue enumerates a great number of superior fruits, and as the establishment of M. Lefevre & fils is one of high standing, we doubt not but that gentlemen who wish to import trees from France can do so to good advantage, through the agency of MM. Lander, of New York. We have several of the *Catalogues*, which have been forwarded to us, which we will distribute to those who will call upon us for them.—*Id.*

A Cemetery in Albany, N. Y.—We see, by a notice which has appeared in some of the newspapers of New York, since our article was written, in this number, that the citizens of Albany have had a meeting preparatory to the organization of a company for the purpose of purchasing a spot of ground, to be laid out as a cemetery. It is time they should move in this matter, unless they wish to be outdone by the flourishing city of Rochester. We believe some very beautiful situations may be found in the vicinity of Albany, for cemeteries.—*Id.*

Euphœbia Jacquinœfolia.—A plant of this brilliant species, one of the finest of the euphorbias in cultivation, is now in bloom in the stove at Belmont Place, Watertown. A description of it will be found in our II., p. 261. Mr. Buist, of Philadelphia, and Mr. Hogg, of New York, both imported plants, from whence it has been disseminated among amateurs, though it is not yet found only in the most choice collections. The plant at Mr. Cushing's has been well grown, and its long and slender shoots are covered with its dazzling scarlet flowers, which, springing in great numbers from the axils of the leaves, for the distance of a foot or more, have a plume-like and stately appearance. It will prove a great favorite in all collections.—*Id.*

The Swainstone Seedling Strawberry, a new variety, lately originated in England, has been recently imported by Mr. W. Kenrick, nurseryman. It is said to possess the remarkable property of bearing all summer. Ripe fruit, green fruit, blossoms, and buds may be seen upon the plant at the same time: it is of medium size, and good flavor. We shall allude to it again under our pomological notices.—*Id.*

New article for hot water pipes.—We have lately had put up, in our green-house, a hot water apparatus, the pipes of which are

manufactured of *galvanized iron*: to all appearance, thus far, it answers equally as well as copper; how lasting it may be, in comparison with copper, remains to be seen. It may be put up at one third the expense of copper, and where there are large and extensive ranges of hot-houses and green-houses, it promises a great saving in the cost of an apparatus for heating. The article has been lately introduced from Europe, where it has been used for stove pipes, gutters, window shutters, covering roofs, &c. It is said to have all the durability of copper and the stiffness of iron.—*Ed.*

ART. III. *Massachusetts Horticultural Society.*

Saturday, Nov. 28th, 1840.—Exhibited. Fruits:—From R. Manning, the following apples:—Sam Young, (*Pomological Magazine*, No. 130,) Victorious Reinette, Bordie tricolor, Reinette cœur de France, and a small apple, taken from a tree at Elsineur, in Denmark, by Capt. Wheatland, of Salem, in September last; also, Bishop's thumb, (London Horticultural Society's *Catalogue*, No. 125,) Passe Colmar, and Beurré Diel pears.

The Reinette cœur de France was the produce of a dwarf tree, received from the Brothers Bauman, of Bohwiller, on the Rhine, France. It is a medium sized fruit, red skin, yellow flesh, and extremely high flavored.

The following description of the other Reinette exhibited, is extracted by the Chairman from the work of Mr. Christ, a German pomological author:—

"No. 13. Victorious Reinette, (Reinette Triomphante.) An uncommonly fine, large, and well formed apple, which, on being deposited on the floor, acquires a deep yellow tint, marked with starry points, and frequently rough brown spots, or large warts; its eye represents a regular star; its flesh beneath the tender skin, is yellow, firm, though delicate, yielding abundance of juice that possesses a pleasant aromatic flavor; it ripens about Christmas, and may be kept till March. The tree grows luxuriantly, and becomes of considerable size."

From B. V. French, Danvers Winter Sweet, Winter Queen, red Doctor, Pennock's red Winter, Bean apple, Pomme gris, Newark King, Winter Spice, Cumberland Spice, and four unnamed kinds of apples; also, Monsieur le Curé, (or Burgomaster) pears.

Dec. 5th.—A stated meeting of the Society was held this day—the President in the chair.

The committee to whom was referred the subject of awarding premiums in medals or plates, in the place of money, asked for fur-

ther time to complete their report. A committee was chosen to audit the Mount Auburn records for the year 1840. Adjourned for two weeks, to December 19th.

Exhibited. Fruits:—From S. Downer, Forelle, (fair specimens,) Lewis, Catillac, Passe Colmar, Burgomaster, and Beurré d'Aremberg pears, the latter fine; also, Roxbury russet, Golden russet, Spitzemberg, Ortley pippin, and Lady apples, and Catawba grapes in a good state of preservation. From S. Pond, Beurré Diel, Duchess d'Angouleme, and Echasserie pears, the first named very large and fine; also, musk quinces.

From the President, Mr. Wilder, Glout Morceau, Burgomaster, Beurré d'Aremberg, Prince's St. Germain, Passe Colmar, and the Columbian Virgoulouse pears, all large and handsome specimens, and well ripened: the d'Aremberg was in excellent eating: the Columbia Virgoulouse is a pear of great beauty, but not, we think, first rate.

Dec. 12th.—Exhibited. Fruits:—From the President, Mr. Wilder, Passe Colmar, Monsieur le Curé, (Burgomaster,) and Columbia, Virgoulouse pears.

The Monsieur le Curé pear having been cultivated under so many names, the chairman, Mr. Manning, took the occasion to make the following remarks:—

It was raised from seed, or first introduced into notice, by the curate of a small town near Paris, and, for some years, was considered identical with the St. Lezin. It has been extensively cultivated in England, under the names of Monsieur le Curé, Dumas, Poire de Clion, Vicar of Wakefield, and Wilmot's new pear.

A letter received from M. Vilmorin, of Paris, states that it is a new pear, entirely distinct from the St. Lezin,—that it is a valuable early winter fruit, and its true name should be Poire de Clion.

It was first cultivated in this country by the late John Heard, Esq. as the Burgomaster, and described by that name in some pomological works, and the name of "Winter Bartlett," which it has received in Boston market, will best show the high estimation in which it is held.

From B. V. French, Ortley pippin, Monstrous pippin, (Coxe, No. 27,) and red Nonsuch apples. From Dr. E. Wight, some large red apples, without name.

Dec. 19th.—An adjourned meeting from the 5th—the President in the chair. No business of importance was transacted. Adjourned two weeks, to January 2, 1841.

Exhibited. Fruits:—From B. V. French, yellow Bellflower apples, very fine specimens. From Benjamin Willis, Esq., apples raised in Granville, Bond Co., Illinois; they were of medium size, rather oblong, pointed at the blossom end, flesh yellow, with a peculiar rich and agreeable flavor. They could not be referred, by the committee, to the description of any pomological author.

Dec. 21st.—Exhibited. Fruits:—From S. Downer, fine Beurré d'Aremberg pears. From Dr. E. Wight, pears without name. From Prof. J. I. Russell, Chelmsford, pears without name. From W. C. Chapin, Providence, R. I., specimens of the Marygold apple, considered by the Committee very superior.

ART. IV. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>			<i>Squashes and Pumpkins.</i>		
	From	To		From	To
	\$ cts.	\$ cts.		\$ cts.	\$ cts.
Potatoes, new:			Squashes, per pound:		
Chenangoes, } per barrel, 1 12½	1 25		Autumnal Marrow, ...	2½	3
} per bushel, 50	—		Winter crookneck, ...	1½	2
Common, } per barrel, 1 00	—		Canada Crook Neck, ...	2½	3
} per bushel, 50	—		Pumpkins, each, ...	8	12½
Eastports, } per barrel, 1 75	2 00				
} per bushel, 1 00	—				
Sweet, per bushel, ...	1 00	1 25			
Turnips:			<i>Fruits.</i>		
Common, per bushel, ...	25	37½	Apples, dessert:		
Ruta Baga, per bushel, ...	25	37½	Common, per bushel, ...	50	62½
Onions:			Extra, per bushel, ...	75	1 00
White, per bunch, ...	3	4	Baldwins, per barrel, ...	1 75	2 00
Red, per bunch, ...	3	4	Russets, per barrel, ...	1 75	2 00
Yellow, per bushel, ...	62½	75	Greenings, per barrel, ...	1 75	2 00
White, per bushel, ...	75	1 00	Pearmain, per barrel, ...	2 00	—
Beets, per bushel, ...	50	62½	N. Y. Pippins, per barrel, ...	1 75	2 00
Carrots, per bushel, ...	50	—	Sweet, per barrel, ...	2 00	—
Parsnips, per bushel, ...	75	—	Hub'ston Nonsuch, pr bbl.	—	—
Shallots, per pound, ...	20	—	Dried apples, per pound, ...	3½	4½
Garlic, per pound, ...	12½	—	Pears, per half peck:		
Horseradish, per pound	10	12½	Bleeker's Meadow, ...	—	—
<i>Cabbages, Salads, &c.</i>			Chaumontelle, ...	50	—
Cabbages, per dozen:			Common, ...	37	50
Savoy, ...	37½	50	St. Michaels, per doz.	—	—
Drumhead, ...	50	75	St. Germain, per doz.	75	—
Red Dutch, ...	75	—	Brown Beurre, per doz.	—	—
Brocoli, each, ...	12½	25	Burgomaster, per doz.	50	75
Cauliflowers, each, ...	12½	25	St. Michael Archangel, } per dozen, ... }	50	—
Celery, per root, ...	12½	20	Baking, per bushel, ...	2 00	2 50
Lettuce, per head, ...	12½	—	Grapes, per pound:		
Tomatoes, per half peck, ...	25	—	Malaga, ...	20	25
Cucumbers, (pickled) pr gal.	25	—	Isabella, ...	—	—
Peppers, (pickled) per gallon	37½	—	Quinces, per bushel, ...	—	—
<i>Pot and Sweet Herbs.</i>			Pine-apples, each, ...	—	—
Parsley, per half peck, ...	50	75	Cranberries, per bushel, ...	1 50	1 75
Sage, per pound, ...	17	20	Lemons, per dozen, ...	20	25
Marjorum, per bunch, ...	6	12½	Oranges, per dozen:		
Savory, per bunch, ...	6	12½	Sicily, ...	25	37½
Spearmint, per bunch, ...	6	—	Havana, (sweet), ...	50	75
			Chestnuts, per bushel, ...	2 25	2 50
			Walnuts, per bushel, ...	1 75	2 00
			Castana, ...	—	—
			Almonds, (sweet,) per pound, ...	—	—

REMARKS.—The weather, during a greater part of the month, has been very good for the season: there have been several light snow storms, and last week snow fell to the depth of ten or twelve inches. The cold has not been severe, the thermometer falling down to zero but once during the whole month. The snow fell so evenly, that it has afforded fine sleighing.

Potatoes have become rather heavier: large supplies were laid in in November, and, as there have been constant arrivals since, and sales have been made from the wharf, holders have had to submit to a reduction in prices, as will be seen by a comparison with our last report: this, however, has only been the case with Chenangoes; East-ports are firm at the same prices: sweet potatoes are unusually abundant, and the stock uncommonly good for this late period of the year: they keep much better than usual. Turnips very plentiful. Onions abundant, and the stock well ripened. Carrots are plentiful, and considerable quantities have been sold at from eight to ten dollars per ton. No radishes have yet been received; the first crop has been planted, and will soon be sent in. Horseradish abundant and very good.

The crop of cabbages, for 1840, was much larger than usual, and exceedingly well grown: the market has been well filled all the fall, and purchasers have been well supplied with a prime article at reasonable prices: great quantities of drumheads have been taken for the coasting trade. Cauliflowers are brought in of fine size. Broccoli is nearly gone. Celery is becoming more scarce, particularly that of superior quality, and prices have advanced. There is very little lettuce in market, and what there is, quickly taken up. Tomatoes are all gone. Pickles, of both sorts, are retailing at quotations. The stock of squashes is getting reduced: autumnal marrows keep very poorly, and, in consequence, prices have advanced as the stock becomes smaller: winter crooknecks are yet abundant and cheap: no West Indias have arrived, but a few lots are soon expected. Pumpkins are exceedingly abundant. Parsley is scarce, and in good demand at our prices.

Apples are doing better: the stock has rotted away, and those of selected quality are now to be had: Baldwins, russets and greenings command a slight advance: New York pippins remain the same: Hubbardston Nonsuch and spice apples are all gone: dried apples are plentiful, and a reduction has been made in prices. Of pears, the stock of fine eating sorts is nearly exhausted: a few St. Germaines, Chaumontels, &c., remain: baking are scarcer, and prices improved. Malaga grapes are very abundant and of good quality. Quinces all gone. Cranberries remain the same. Havana oranges are scarce, and good ones command our highest rates. Chestnuts are not in so good demand, and prices have fallen off. Walnuts remain the same; in other kinds no alteration.—*M. T., Boston, Dec. 28, 1840.*

HORTICULTURAL MEMORANDA

FOR JANUARY.

FRUIT DEPARTMENT.

Not much can be accomplished out of doors, this month: all labor is confined to the hot-house, green-house, vinery, or hot-beds. In the former of these departments, vines may be now brought forward for

an early crop; in the green-house, the vines can only be put in readiness for starting in March: but in vineries with brick flues or hot water, the vines, or trees, if any are trained to the wall or the rafters, may be soon started into growth. In hot-beds, strawberries may be forced, or they may be placed on shelves, *near the glass*, in hot-houses or vineries, and they will produce a good crop. The vines, either in the green-house or grapery, should be washed over with a composition of lime, flowers of sulphur, and water, to destroy red spiders and other insects: if not pruned, though it is supposed this has not been neglected, it should be done immediately. Grape vines may be grown from eyes planted in pots the latter part of the month, and placed in a good bottom heat.

FLOWER DEPARTMENT.

Camellias will now be flowering; give them liberal supplies of water at the roots, and syringe over the tops with *clean* water occasionally, in fine weather; this will keep the foliage looking bright and vigorous. If seeds are wanted, care should be taken to impregnate the flowers. Seeds sown in August or September, will now be coming up, and they should be carefully watered.

Oxalises of the various kinds, will now be coming into flower, and they should be watered liberally.

Ericas should be properly watered, and now is a good opportunity to commence propagation.

Geraniums in small pots should now be shifted into the next size, and be placed as near the glass as possible.

Verbenas will soon commence growing, and will require more water.

Cactuses, wanted for flowering early, should now be placed in the warmest part of the green-house; or, if there is a hot-house, removed to that, and watered oftener.

Tree pæonies may be brought into the green-house, for a succession of flowers.

Hyacinths planted in pots in November, and plunged in pits or in the ground, may now be brought into the green-house or parlor.

Stock gilliflower, and other annual flower seeds, may now be planted for early flowering.

Dahlia roots should be inspected—if decaying, the infected parts should be cut out, and the roots placed in a dry, warm room, to heal up. If there is danger of losing any rare kinds, they should be potted, and started into growth.

Green-house plants of many kinds may be propagated successfully at this season, and many of them re-potted before they commence their new growth. Heath, diosmas, roses, geraniums, &c. will require it.

VEGETABLE DEPARTMENT.

Hot beds.—Preparations should now be made to form hot beds for raising cucumbers, lettuce, radishes, and early vegetables of all sorts. We have already given advice how to do this, under this head, as well as in detailed articles in the Magazine, and refer to them for information how to proceed. If preparations are commenced immediately, the seeds may be planted about the 20th of the month.

LIST OF PLANTS.

In the body of the Magazine, a few errors occur in the spelling of the botanical names, the capitalizing of generic and specific names, their derivation and accentuation: these are all corrected in the following list of plants. The synonyms, in several instances, have also been given, where plants have been incorrectly indicated.

List of Native Plants discovered growing near Boston, (Mass.) the present season	245	List of new Genera, introduced into Torrey & Gray's <i>Flora of North America</i> , established mostly on the authority of Nuttall	297
List of Annual Flowers, with the height and color of each, the habit of their growth, &c.	175	An Account of the Cryptogamia growing in Chelmsford, Mass.	340

<i>Acacia affinis</i>	369	<i>Anemone vitifolia</i>	448	<i>Azalea indica punicea</i>	142
armata	195	<i>Anodonte aulimifolia</i>	157	var. <i>purpurea pleno</i>	26
<i>Cyclops</i>	368	<i>Anthericum Liliastrum</i>	447		202
dealbata	369	<i>Antholyza aethiopica</i>	157	Smithii	142
decurrens	110. 369	<i>Antirrhinum, sp.</i>	157	seedlings	195
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intermedia	156	Linaria	317	nudiflora	274
longifolia	156	<i>Aquilegia canadensis</i>	17. 157	viscosa	317
lophantha	369		285	<i>Bahiana sambucina</i>	143
pubescens	110. 368	siberica	17	<i>Bartonia aurea</i>	134. 317
pulehella		<i>Arabis lyrata</i>	157	<i>Basilica tuberosa</i> , probably intended for <i>Basella tuberosa</i>	455
thegonicarpa (?)	156	<i>Aralia nudicaulis</i>	274	<i>Baptisia australis</i>	447
verticillata	110	<i>Araucaria excelsa</i>	448	<i>Beaufortia decussata</i>	388
vestita	368	imbricata	272	<i>Begonia, sp.</i>	388
<i>Achillea montana</i>	17	<i>Arbutus Andrachne</i>	157	argyrostigma	156. 388
Piarnica	410	<i>Ova ursi</i>	235	Sellowii	468
<i>Acónitum</i>	381	<i>Archangelica atropurpurea</i>	334	<i>Berberis Aquifolium</i> , a syn. of <i>Mahonia Aquifolium</i>	411
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var. alba	457	crenulata	156. 312. 468	Tankervillei	156
<i>Agave</i>	337	serratifolia	468	<i>Boronia serrulata</i>	156
<i>Aloe grandiflora</i>	157	solanacea	351	<i>Botrychium fumaroides</i>	
lingua	157	<i>Arethusa bulbosa</i>	235	<i>Bouvardia splendens</i>	299
variegata	157	ophioglossoides	315	triphylla	241. 276. 299
<i>Alonsoa elegans</i>	156	<i>Aristolochia braziliensis</i>	85	<i>Bromelia</i>	327
<i>Alstromeria Pelegrina</i>	316	<i>Arum crinitum</i>	156	<i>Burchella capensis</i>	156
psittarina	149	tryphyllum	274	<i>Buxus arborescens</i>	388
pulehella	812	<i>Asclepias aurea</i>	312	<i>Cacalia coccinea</i>	448
tricolor	312	curassavica	468	<i>Cactus, sp.</i>	159
<i>Alyssum saxatile</i>	17	syriaca	317	scopa	101
<i>Amaryllis aulica</i>	202	tuberosa	3. 6	<i>Calandrinia discolor</i>	133
<i>Belladonna</i>	389	var.	316	grandiflora	133
grandiflora (?)	448	<i>Aster argophyllus</i>	149	speciosa	133
Johnstoni	156. 202. 233	<i>Astrantia major</i>	315	<i>Calceolaria bicolor</i>	202
Josephine	388	minor	447	rugosa	202. 457
Norrisii	156	<i>Azalea indica</i>	25. 104	Majoriana	203
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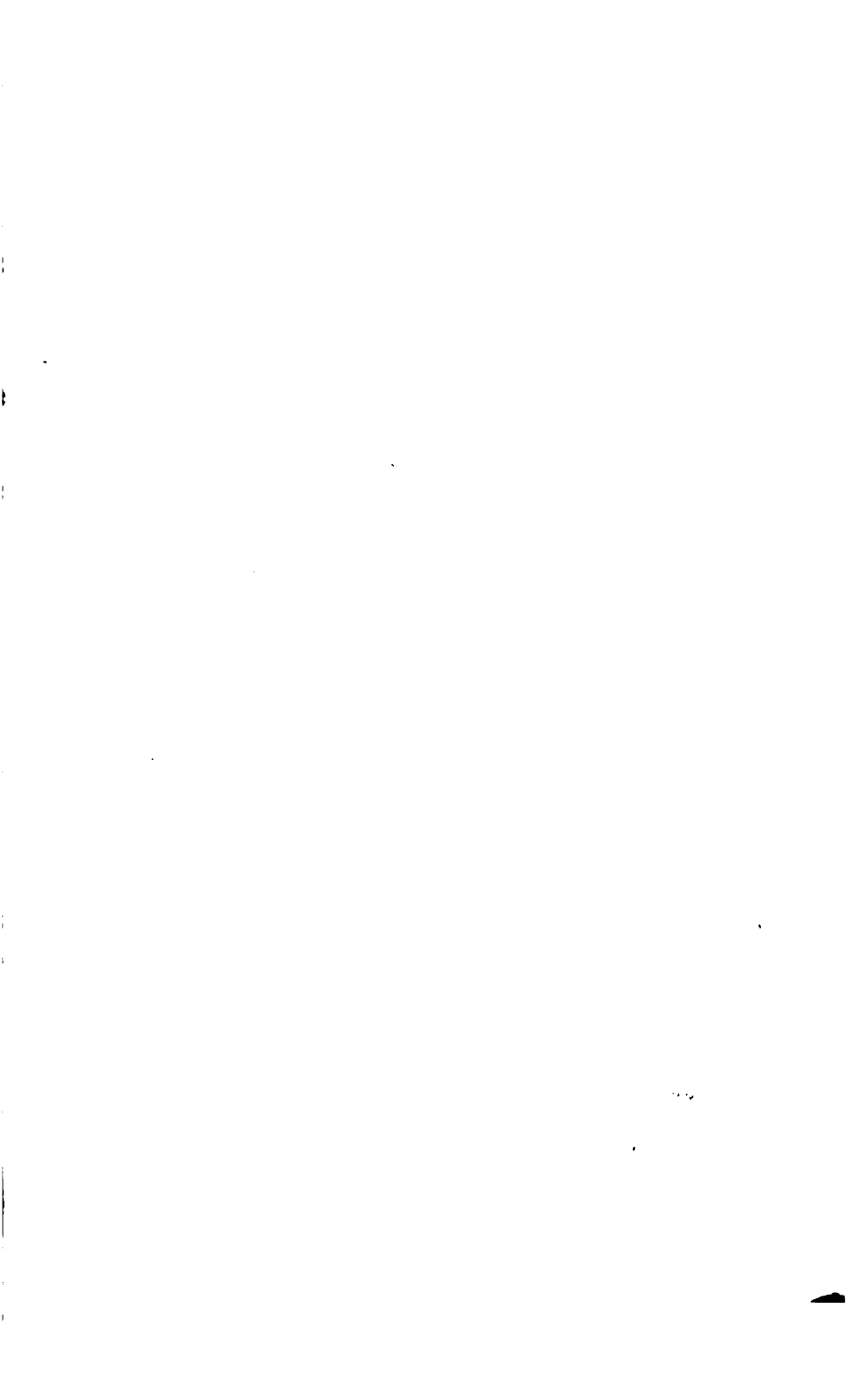
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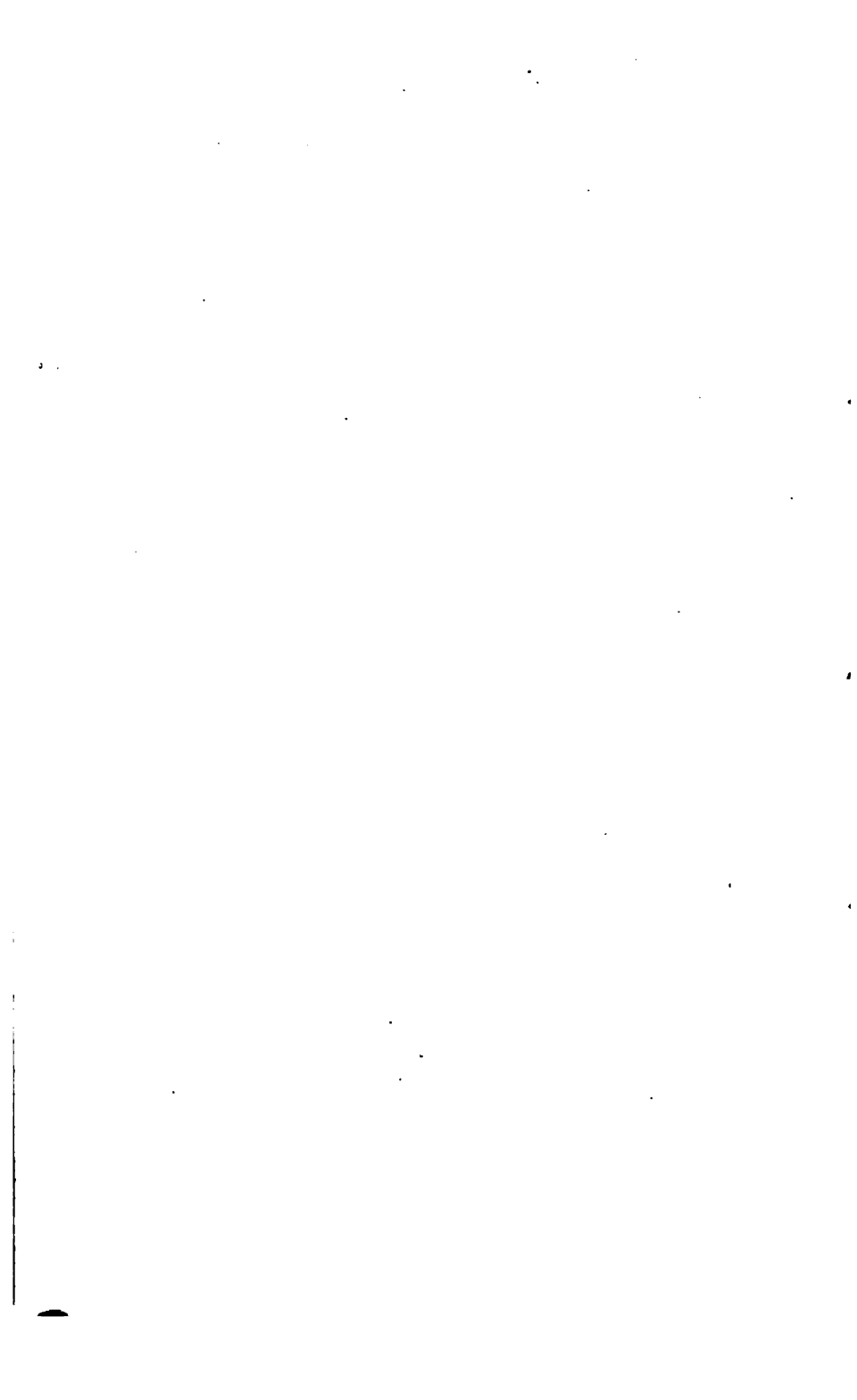
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<i>Lantana Douglassii</i>	351	<i>Menziëria cærulea</i>	314	purpurea	447
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<i>prostrata</i>	102	<i>Russelia juncea</i>	234	<i>pallida</i>	195
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<i>Polygala grandiflora</i>	110	<i>cotyledon</i>	382	<i>alba</i>	254
<i>rubella</i>	315	<i>Sieboldii</i>	468	<i>sulphurea</i>	254
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<i>ferruginea</i>	447	<i>Tenorei</i>	140		
<i>formosa</i>	17	<i>Solanum, sp.</i>	157. 309		
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		<i>linearis</i>	298		
		<i>Sonchus, sp.</i>	157		
		<i>Sparaxis versicolor</i>	149		
		<i>Spartanum africana</i>	195		

The following are, prob-
ably, only varieties of the
species enumerated above, and
have nearly all been produc-
ed by hybridization, a large
part of them from the *Tweed-*

leaves, Eyedana, and chama-		Wales's seedling	256	<i>Viola pubescens</i>	274
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Colcordii	256		387	Wistaria Consequana	141
elegans	447	sp.	157	143, 229, 231, 306, 384	
fulgens	202, 254, 309	many species and va-		frutescens	308
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Pépperi	127, 195, 254	<i>Pericaria alba</i>	447	<i>Zephyranthes Atamisce</i>	53
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<i>Tweediaea grandiflora</i>	128, 254	cucullata	157	glabrata	103
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		pedata	157, 235		





THE MAGAZINE

OF

HORTICULTURE.

FEBRUARY, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *Pomological Notices ; or Notices respecting new and superior varieties of Fruits worthy of general cultivation. Notices of one hundred and seven varieties of Apples, which have produced fruit in the Pomological Garden, during the years 1839 and 1840.* By R. MANNING, Esq., Pomological Garden, Salem, Mass.

It is with the greatest pleasure that we are now enabled to lay before our readers the results of Mr. Manning's indefatigable labors, in identifying and proving more than *one hundred* of the best varieties of that most valuable fruit, the apple. To those who know how to rightly estimate the task which Mr. Manning has performed, it is not too much to affirm that he has accomplished more than any other individual in this country, and, we may perhaps say, as much or more than any one, even in England. The Horticultural Society of London, with Mr. Thompson at the head of the fruit department, have been many years collecting information upon fruits, and have attempted to reduce to some order the almost innumerable varieties under cultivation: the labors of the Society, thus far, are well known, and the benefits which they have conferred upon the horticultural public have been appreciated by all cultivators of fruits. They are still, with the aid of Mr. Thompson, assiduously collecting all the knowledge which they can obtain in relation to the subject.

The Caledonian Horticultural Society of Scotland, with Mr. Barnet at the head of the fruit department, have been for some time collecting information on fruits, and proving the varieties; but, beyond these examples, we do not know of any other societies or any individuals who have accomplished as much as Mr. Manning; and when we take into consideration the means which the societies we have just named have at their command, his labors will appear still more important.

We do not make these remarks with any view to over-rate Mr. Manning's labors: he would not thank us for that. They are already so well known, and his good judgment has been so often appealed to, by many of our most excellent cultivators, that there is no necessity of making this statement, in order to give additional weight to his descriptions. They will be received as the result of long experience and indefatigable research, and will be valued as highly among our cultivators, as the observations of Mr. Thompson have been by the pomologists of Great Britain.

The slow progress which has been made in proving and identifying fruits, has often been a matter of surprise with many, and we are glad that Mr. Manning, at the close of his remarks, has so happily stated the reasons which have prevented the more rapid accomplishment of this object. It is not the work of a moment—a tree does not perfect its growth, and produce its fruit, in a single season:—patience, and perseverance must be exercised, before the cultivator realizes his early expectations; and how often does it happen, when he has looked anxiously forward to the period which was to settle all doubts, that he has been disappointed—bitterly disappointed, to find that the care, the patience, and the anxiety, with which he had watched a favorite tree, have been wasted, and he is no nearer the attainment of his wishes than he was years before. Let those who think that investigation on this subject has proceeded too tardily, attempt the object themselves; a few years, spent in patiently awaiting the production of the fruit, will convince them that their labors will add but little towards its speedy accomplishment.

We have somewhat extended these remarks; but if they have contained nothing of interest, our readers will find the time spent in their perusal fully made up in the additional interest of Mr. Manning's communication.—*Ed.*

1. *Alexandria*.—Very large red, striped with yellow; fruit tender and mild. Ripe from September till January.
2. *Aunt Hannah*.—Medium size, round, smooth, yellow; good from October to February. This apple is supposed, (as its name indicates,) to be a native fruit. It probably originated in Essex county.
3. *Benoni*.—Medium size, red and yellow, very good and handsome. A native fruit. Ripe in August.
4. *Baldwin*.—Well known and extensively cultivated in the New England States: so far as our own taste can be trusted, we prefer it to any other winter apple in our collection.
5. *Boxford*.—Medium size, yellow and red; great bearer, and very fine; high flavor. Ripe from September till January.
6. *Bowback Sweet*.—Medium size, round, yellow: in use during the months of September and October. Sufficient time not having elapsed to investigate this fruit, it may prove synonymous with some other variety.
7. *Brabant Bellflower*.—Large, round, greenish yellow and dull red. Ripe in October and November. A fine fruit, the scions of which were received from the London Horticultural Society.
8. *Blue Pearmain*.—Large red, with stripes and blotches of darker red, approaching to purple, and covered with a dense bloom: said not to be a great bearer. Ripe from October to February.
9. *Baltimore*.—Very large, with yellow skin; excellent for the kitchen. Ripe in the autumn and first part of winter. Said to be the same as the Monstrous Pippin, *Coxe*, No. 27.
10. *Black*.—(*Coxe*, No. 67.) Medium size, dark red, nearly black, with a mealy bloom; very tender, mild, and agreeable. Ripe in December and January.
11. *Borden's Early*.—Small, red and yellow. Ripe in August and September. Originated in Rhode Island, from whence I obtained the scions.
12. *Baldwin Sweet*.—Large, oblong, pointed to the blossom end, bright red; handsome and good. Ripe in January and February. Origin unknown, but supposed to be a native fruit.
13. *Crowninshield Sweet*.—Medium size, round, yellow. Ripe in September and October. A native fruit, from Danvers, resembling the Bowback Sweet, No 6.

14. *Calville rouge d' Ete.*—Small, oblong, striped red and yellow. Ripe in July and August.

15. *Canadian Reinette.*—Large, round, yellow, with projecting ribs; flesh yellow, high flavored, and rich. Ripe from January till March. We received the scions of this valuable variety from the London Horticultural Society.

16. *Cambuthnethan Pippin.*—Medium size, round, yellow, striped with red, a good apple: in use from September till January. Originated in Scotland.

17. *Conway.*—Medium size, yellow, with a high flavor, but rather astringent. Ripe during the winter. Originated in Hamilton, Essex county.

18. *Charlowminski.*—Large, red, striped with yellow, and covered with a dense bloom; flesh white, tender, and agreeable. A valuable apple, in eating in August. It is said to have been introduced into England from Russia.

19. *Cathead Greening.*—Large, green; ripe during the winter months. Origin unknown: it may prove synonymous with some other variety.

20. *Danvers Winter sweet.*—(*Eppes's Sweet.*) A fine, large, yellow apple, excellent for the table or baking. In use from December till March; a great bearer.

21. *Drap d'Or.*—Large, yellow; flesh tender, mild, and good. Ripe in September and October. This is the *Drap d'Or* of *Coxe* and *Ronald's*, but we think, not of the French authors.

22. *Downton Pippin.*—Small, yellow; flesh high flavored, rather acid; resembles the English Golden pippin. Ripe in October and November. We believe this apple would be more acceptable, if kept till a later period.

23. *Dodge's Early red.*—Medium size, dark red and yellow; agreeable flavor. Ripe in August. This apple we found growing on a farm in North Salem; it will, no doubt, be found synonymous with some other fruit.

24. *Duchess of Oldenburgh.*—Medium size, round, yellow and red striped, with a blue bloom. Ripe in August. Very handsome and good.

25. *Conant's red Winter sweet.*—Large, red, with a small portion of yellow; good for the table or baking during the winter months. Originated on the farm of Col. Conant, in Beverly, Essex County.

26. *Early Golden sweet.*—Medium size, yellow; ripe in

September. Much cultivated in Connecticut, and the western part of Massachusetts.

27. *Early Bough*.—(Coxe, No. 3.) Large, yellow, with a tinge of red. A very valuable apple for the table or baking. Ripe in August and September.

28. *English Codlin*.—(Coxe, No. 9.) Large, yellow, oblong. In use from September till October, and sometimes later.

29. *Fameuse*.—Medium size, dark red; flesh very white, from whence one of its synonyms, *Pomme de Nieve*. Ripe in October and November. A valuable fruit.

30. *Fall Harvey*.—Large, yellow, round or flat; a native fruit. Ripe in October and November. Very fine and high flavored.

31. *Edwards's Russet*.—Of medium size, round or flat; skin yellow, red, or russet. This apple originated in Essex county, and is valuable for its late keeping. I have had them in a perfect state of preservation in May.

32. *Gravenstein*.—The size is large, oblong, sometimes round; skin yellow, beautifully striped with red; flesh rich and high flavored. One of the most valuable apples cultivated. In use from September to November.

33. *Golden Russet*.—Medium size, oblong, of a dark russet color; flesh spicy, and high flavored: trees grow remarkably upright. Ripe from October till December.

34. *Green Sweet*.—Small, color green; when fully ripe, a dull yellow. A valuable apple for the table, or baking, keeping till May. Said to be different from the green sweeting described in Thatcher's *Orchardist*.

35. *Hawthorndean*.—Rather above the medium size; skin light yellow, with a bright red cheek; flesh white, without any indication of excellence; more beautiful than good. A Scotch apple, ripe in September and October.

36. *Haskell Sweet*.—Medium size, round, yellow. A fine apple for baking, in September and October. Originated on the farm of Deacon Haskell, in Ipswich.

37. *Hubbardston Nonsuch*.—Large, oblong; color red and yellow. The character of this apple is very high. A native fruit. In use from October to January.

38. *Kilham Hill*.—Large, yellow, green, and red; flesh yellow, high flavored, and good. A native fruit, originated on the farm of Daniel Kilham, Esq., in Wenham, Essex

county. A great bearer, and in use from September to November.

39. *Knowles's Early*.—Size, large; color, green, yellow, and dull red; flesh tender and agreeable. It ripens in August and September. The original tree was sent from a nursery near Philadelphia, as a native fruit.

40. *King of the Pippins*.—Of medium size; color yellow and bright red; flesh yellow and high flavored. It ripens in October, and much resembles the Ribston pippin.

41. *Longville's Kernel*.—Size small, oblong; color yellow striped with red. Ripe in August and September. An English apple, described in the *Pomological Magazine*, p. 63.

42. *Lovett Sweet*.—Of medium size; color, when fully ripe, bright yellow. A good apple for the table, and for baking, in the winter months. A native fruit, from Beverly.

43. *Lyscom*.—Size large; color greenish yellow and dull red; flesh tender and fine. A first rate fruit from September till November. Originated in Worcester county.

44. *Menagere*.—One of the largest apples we have ever seen; very flat; color yellow, with a little red; without much flavor, and very suitable for the kitchen. Ripe from September to January.

45. *Murphy*.—Size large, oblong, round; color red, with dark red blotches. A good apple, resembling the Pearmain. In use during the winter. Originated in Salem.

46. *Margill*.—Of medium size, yellow, russet, and red; resembles the Ribston pippin. In use from October to February.

47. *Minister*.—Size large; shape oblong, pointed to the blossom end; color a bright red; flesh white, tender, and very pleasant. This is a fine fruit; in use from October to January. Originated on the farm of Mr. Saunders, in Rowley, Essex county.

48. *Margaret*.—Of medium size; round; color dull red, striped with yellow. Ripe in August. Distinct from the red Juneating, a fine early apple.

49. *Marigold*.—Size large; skin yellow and red striped; flesh yellow, rich, and good. In use from December till February. Origin unknown.

50. *Mank's Codlin*.—Of medium size; oblong; color a pale yellow; flesh white, without much flavor. A very handsome fruit; ripe in September and October.

51. *Marquis*.—Size large; color yellow and bright red, resembling the Baldwin. A native fruit, received from the late Dr. Fiske, of Worcester.

52. *Nonsuch*.—Size large; color dark red, with many distinct yellow spots. A fine table fruit, in use during the months of December, January, and February. Distinct from the English apple of the same name.

53. *Newton pippin*.—This apple, so superior to all others, when raised in New York and Pennsylvania, with us is a fruit of medium quality only, and, on standard trees, subject to blight, like the St. Michael pear. I have had some good fruit on dwarf trees, but they always are deficient in that high flavor for which they are so much valued at the South. I have not yet been able to discriminate between the green and yellow pippin; the difference, if any, appears to be caused by soil, situation, and climate.

54. *Ortley pippin*.—Of medium size, oblong; skin yellow, with white specks and dark blotches; the flesh firm and high flavored. Ripe during the winter months. A great bearer.

55. *Oslin*.—Size small, round; skin a pale yellow; flesh tender, juicy, and good; it ripens in August and September.

56. *Phineas apple*.—Medium size; skin dark red; flesh white, without much flavor; an excellent kitchen fruit, keeping well. In eating in March and April.

57. *Pear Tree Lot apple*.—Size small, round, oblong; skin a clear light yellow; flesh sweet and juicy. A good apple for the table, or for baking, in September.

58. *Putnam's Harvey*.—Size small; skin a greenish yellow, with a tinge of red; flesh very mild and pleasant. This apple originated in Danvers, and is a fine table fruit during the months of September and October.

59. *President*.—Size large, form oblong; skin a clear bright yellow; flesh fine, with considerable flavor. It originated in Essex county, and is a handsome apple for the market. Ripe in September and October.

60. *Pennock's*.—This apple is of very large size; round, sometimes oblong; skin a dark, shining red; flesh sweet and good. A very desirable apple for the table, or baking, during the winter months. A great bearer.

61. *Pumpkin Sweet*.—We have several varieties under this name, in bearing; they are fine for baking, but sufficient time has not elapsed for investigating either the comparative value

of the fruits, or the authenticity of the names by which we received them.

62. *Pomme d'Api*.—(Lady apple of Coxe.) Size very small, flat; skin light yellow, with a bright red cheek; flesh white, tender, and very agreeable. A great bearer, but better on dwarf trees than on standards. Ripe from January to March.

63. *Porter*.—This native fruit, one of the finest of its season, is generally of large size; form oblong, tapering to the blossom end; skin a bright yellow, sometimes with a red cheek; flesh fine and tender. A good bearer, and ripe in September.

64. *Pumwater Sweet*.—Size large, round; skin yellow, with some red; flesh sweet, juicy, and good. An excellent table and baking apple, from October to January.

65. *Endicott pippin*.—This is a large, oblong apple, of a bright yellow color, and a pleasant taste; ripe from October to January. It is a native of Topsfield, Essex county, where it is sometimes called "Perkins's Long." I received the scions from W. P. Endicott, Esq., of Salem.

66. *Red Juneating*.—Of medium size, oblong, pointed to the blossom end; skin bright red and yellow; flesh firm, high flavored, and good; ripens in August and September. The trees have an upright growth, and are good bearers. Distinct from the red Margaret.

67. *Rambour d'Ete*.—(Coxe, No. 8.) The size is large, flat, or round; skin greenish yellow and red; flesh firm and juicy; ripe in September. The trees grow large, and are of a spreading form.

68. *Roxbury Russet*.—Medium size, flat or round; skin yellow and russet, with a small portion of red; flesh dry. It is a fine keeping apple, and very extensively known and cultivated in New England.

69. *Red Astracan*.—Medium size, round; flesh white, juicy and pleasant; skin a dark red, covered with a thick bloom. A very handsome and desirable apple, in August and September.

70. *Red Crab*.—Size small; skin a bright and shining red, with a little yellow; it resembles the Lady apple in size, shape, and color, but has more flavor. Ripe in October and November. Produced from seed at the Pomological Garden.

71. *Russet Pearmain*.—A little above the medium size;

skin russet, with some red stripes and rough warts; flesh yellow, sweet, but dry. In use during the winter months.

72. *Red and green Sweet*.—(Coze, No. 103.) This is a large and handsome fruit; color bright red, mixed with green and yellow; shape oblong; flesh sweet, tender, and agreeable. A good apple, in use during the month of September.

73. *Ribston pippin*.—(Coze, No. 41.) Of medium size; form round; skin yellow, mixed with red and russet; flesh yellow and high flavored. An early winter apple, of great merit.

74. *Reinette Cœur de France*.—Size rather small, round; skin a dark and shining red; flesh yellow and rich, but rather dry. Ripe in December and January.

75. *Reinette noir Sanguine*.—Of medium size, round; of a dark red color; flesh yellow, dry, and without any indications of a superior fruit. Ripe in January.

76. *Red Calville*.—(Coze, No. 62.) Of large size, round; color a dark red, approaching to black; it is covered with a mealy bloom. A winter fruit, of medium quality.

77. *Red Gilliflower*.—Of medium size, round, oblong, pointed to the blossom end, with projecting ribs; skin dark red; flesh white and agreeable. A winter fruit, much prized in some parts of the country.

78. *Red Ingestrie*.—The size is small, round, oblong; color red, mixed with yellow and indistinct russet; flesh hard, with a high flavor, often with too much acid. A fruit highly valued in England. It ripens in September and October.

79. *Rambo*.—(Coze, No. 26.) Of medium size, round or flat; color yellow, mixed with red; flesh white, tender, and good. It ripens in October, and keeps till December.

80. *Summer Pearmain*.—(Coze, No. 7.) Rather above the medium size, oblong, striped with red and yellow; the flesh is very tender and good: it ripens in September. This is the Summer Pearmain of Coze: we have not yet proved its identity with the apple of the same name cultivated in England.

81. *Summer Rose*.—(Coze, No. 6.) Of medium size, sometimes small; form round, sometimes oblong; skin bright yellow, mixed with red, and red blotches; the flesh is fine, juicy, and sprightly. It ripens in August, and is an apple of an excellent quality.

82. *Summer Queen*.—The size is rather large; form oblong, pointed to the blossom end, where it terminates in some

small protuberances; the skin is yellow, striped and clouded with bright red; the flesh is yellow, rich, and good. It ripens in August and September.

63. *Sweet Spice*.—The size is small; form flat; skin yellow and light red; flesh sweet, tender, and fine. It ripens in September and October.

84. *Superb Sweet*.—Of medium size, oblong; skin yellow; flesh sweet, and rather dry. It ripens in September and October. Origin unknown.

65. *Swaar*.—Of large size, round or flat; skin smooth, a greenish yellow, sometimes with a little red; the fruit handsome; the tree a great and constant bearer. It is in use during the winter. Although I have received this apple from various sources as the *Swaar*, I am doubtful about its being the fruit described by Coxe as the *Swaar*; it is deficient in the good qualities which he states his *Swaar* to possess.

86. *Summer Sweet Russet*.—Of medium size, oblong; skin yellow, mixed with russet; the flesh is sweet and dry. Proper for baking. Ripe in August.

87. *Sam Young*.—The size is small; form flat; skin yellow, red, and russet; the flesh is yellow, firm, rich, and high flavored. It ripens in winter.

88. *Titus Pippin*.—Of large size, oblong; skin light yellow; flesh juicy, without much flavor. I received this fruit from Flushing. It ripens in November and December.

89. *Tetoffsky*.—Of medium size, round; skin yellow, beautifully striped with red, with a bloom, which, when rubbed off, leaves the surface very smooth and shining; the flesh is juicy and pleasant. A fine table apple, ripening in August.

90. *Tolman Sweet*.—Of large size, round; skin yellow, when fully ripe; flesh juicy and sweet; it resembles the *Danvers Winter Sweet*. An excellent table or baking apple during the winter.

91. *Victorious Reinette*.—The size is large, oblong; skin a pale yellow, with numerous white specks and projecting warts; flesh firm, juicy, and rich. An early winter fruit.

92. *Winesap*.—Of medium size, round, color a dark red, with a few yellow streaks; flesh yellow, juicy, and of medium quality. A great bearer, ripe in the early winter months.

93. *Indian Prince*.—This apple is rather above the medium size, round; color a dark bright red; flesh white, the flavor good. It ripens in September and October.

94. *Early Harvest*.—(Coze, No. ?.) This apple is sometimes of large size, the form round; the skin, when fully ripe, of a bright straw color. If eaten before maturity, or if ripened in the house, it has too much acidity; it should remain on the tree till it has acquired its bright color, when it is a very delicious apple. Ripe in July.

95. *Red Quarrenden*.—This apple, when the trees are in good ground, is sometimes above the medium size; the form is round or flat; the skin a dark red, and the flavor sprightly and good. Ripe in September and October.

96. *Williams's Favorite*.—A fruit of medium size, form oblong; skin a beautiful bright red; the flesh is pleasant and agreeable; a great favorite. Ripens in August. A native fruit, originated in Roxbury.

97. *Beauty of the West*.—This is a large and very handsome apple; the form is round; the skin yellow and red mixed; the flesh is sweet, juicy, and good. It ripens in October and November, and may be preserved some time.

98. *Yellow Bellflower*.—(Coze, No. ?.) This apple is of large size; oblong form, with protuberances at both ends; the color is a pale yellow, sometimes with a tinge of red; the flesh is white, tender, and juicy. A fine apple from January to March, and a good and constant bearer.

99. *Pickman pippin*.—Of medium size, round; the skin a bright straw color; the flesh is white, firm, and rather acid; An excellent apple for the kitchen, during the winter months.

100. *Pomme Gris*.—The size is small, form round or flat; skin of a yellow russet; the flavor good. A native of Canada, where it is highly valued. In use during the winter months.

101. *Rhode Island Greening*.—(Coze, No. 48.) The size, when the trees are in rich land, is large; the form round; the skin green, when at perfect maturity of a dull green, frequently with a small portion of dull red. A good soil and cultivation renders this apple large, and much superior to what it is under different management. A fine winter fruit.

102. *Wine apple*.—(Coze, No. 34.) Of medium size, round; the skin bright red, with indistinct stripes of yellow; the flesh is juicy and excellent. Ripe from January to March.

103. *White winter Calville*.—(Coze, No. 61.) The size is large; the form round, with projecting ribs; the flesh white and tender, without much flavor. In use during the winter: in our climate, it is better on dwarf, than on standard, trees.

104. *Franklin Golden pippin*.—Of medium size; form round, oblong; skin a bright yellow; flesh juicy and acid. Ripe in October and November.

105. *Kerry Pippin*.—Of medium size, often small; form oblong; skin beautiful yellow and red; the flesh firm and pleasant. Ripe in October.

106. *White Astracan*.—The size of this apple is sometimes large; the form oblong; skin a pale yellow; the flesh with a sharp, rich, and agreeable flavor. Ripe in August.

107. *Winter Pearmain*.—Of medium size; rather oblong; skin a greenish yellow, mixed with dull red stripes. A fine apple from February to April.

Coxe's *View of the Cultivation of Fruit Trees* contains descriptions of one hundred and thirty-three varieties of the apple. After twenty-five years spent in collecting proof trees, and comparing the produce with his work, I have succeeded in identifying only forty-four. I have trees of nearly all the remaining sorts, which will soon be in a bearing state: these, with all those of high character, on dwarf stocks, selected from the nurseries of France and England, and additions of most of the new fruits of our own country, as they are brought into notice, will soon form a collection sufficient to gratify the curiosity or taste of the amateur, and the cultivator for the market.

To those persons, practically acquainted with the subject, no excuse will be necessary for the little which has been performed; to such only is known the trouble, anxiety, and disappointments attending the pursuit of this object. The London Horticultural Society published their second edition of their *Catalogue* in 1831; since that time, with more means than any other society or individuals, in fact, with more than all others combined, and with a gentleman at the head of this department who stands unrivalled in investigations of this sort, they have not collected information enough to justify them in publishing a third edition.

After spending, myself, near a quarter of a century in this pursuit, I regret that the progress I have made is yet so small.

It is to be expected that with the information which we have collected, we shall, in future, advance with more rapidity; and, if it should be in our power to pursue these investigations another quarter of a century, we shall then, as we always have done, keep continually in our mind, that "we have much to learn."—*R. Manning, Pomological Garden, Salem, Mass., Jan., 1841.*

ART. II. *Some Remarks on the Planting of Fruit Trees; more particularly illustrating the bad effects resulting from deep planting.* By the EDITOR.

THE cultivation of fruit trees is now attracting so much attention, that any remarks which have a bearing upon their planting, or future management, are eagerly sought after by individuals who are laying out gardens, and collecting together all the choicest varieties of fruit, or who are renovating old ones and replacing the old sorts with those of better quality. It is gratifying to see the increasing taste for new and fine fruits; and when it is taken into consideration that the best varieties are as easily cultivated as those of inferior quality, it is certainly preferable to select such as will afford a constant succession of superior fruit. Twenty years ago, very few of the fruits which are now generally grown in our gardens and produce abundant crops, were to be found in the country: even ten years since, not more than half of the many fine varieties which are now so much esteemed, and are to be seen in many choice collections, were to be found only in the grounds of the nurseryman; and very many of the best have been fruited for the first time during the past five years. Within the first named period, more than one hundred seedlings, of American growth, have been introduced to notice, and, from their great excellence, have been extensively planted, to the exclusion of many of the foreign varieties. The labors of the venerable Dr. Van Mons, and other German and French pomologists, together with those of the late Mr. Knight, have been the means of enriching our tables with an immense number of superior varieties of fruits.

The cultivation of fruit trees is not so well understood as it should be: and, from the want of a proper knowledge of planting, has arisen much disappointment in the production of fine fruit. A judicious selection of soil, suitable to the nature of the trees—its proper preparation—careful planting—the application of manure—and pruning,—are subjects which have not been sufficiently attended to by a majority of cultivators, when forming a collection of fruit trees. If the trees are only placed in the ground, the work is considered as wholly per-

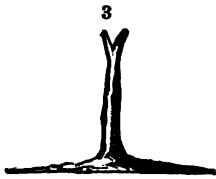
formed, and no further care is needed, only to occasionally lop off a few of the branches. An idea that trees can be grown without any extraordinary care, has been so generally prevalent, that it has led to great disappointments; and when they have ceased to produce abundant crops, the fault is attributed to the variety—which is considered as worn out, and unfit for further cultivation.

If we should examine into all the errors which are committed in the planting of fruit trees, we should find that one of the greatest of all is, that of *too deep planting*. The soil may be good—the situation favorable—manure liberally supplied, and the pruning judiciously performed—but if the error of deep planting has been committed, it will render unavailing the efforts of the cultivator to make his trees produce good crops of fine fruit. It is from this reason that we see how rapidly the fruitfulness of trees decreases, in cultivated gardens, as they become older, until they cease to bear altogether, and are finally rooted out. The trunks and branches become mossy and cankered—the sap vessels do not perform their functions, and the growth is so feeble that no blossom buds are perfected, or, if perfected, the trees have not sufficient strength to hold the young fruit, which soon falls to the ground. We are persuaded, from actual observation, that deep planting is the great cause of the decay and unfruitfulness of trees, in cultivated gardens: in orchards, where the soil is only occasionally ploughed, the roots do not get covered with earth, and the trees remain productive a much greater length of time.

Trees, in the first instance, are planted too deep—and the roots soon get buried, from the settling of the soil and the application of manure, until, in the course of time, they become covered five or six inches: by the continual digging of the soil the surface roots are destroyed, and all the nourishment is obtained from the lower roots, which are so deep that they are placed beyond the action of the sun and air, which are both so necessary to the healthy state of the tree. If the situation is highly favorable, with a dry subsoil, the trees are not so soon affected—but if, on the contrary, it is low, and the soil likely to be saturated with water, and, withal, of a retentive character, the decay of the trees will soon be perceptible, and they will, ere long, become unproductive and decrepit objects.

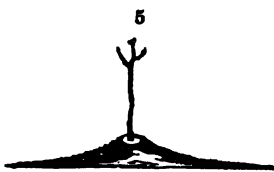
Our attention was attracted to this subject, some time ago, while reading that excellent work, Loudon's *Suburban Gardener*, and it occurred to us that we would make it an article for our pages, at an early opportunity; for we deem it one of importance to every cultivator of fruits. From the observations we have made, it is scarcely necessary that we should illustrate our remarks by engravings, but, as Mr. Loudon has done so, we copy the annexed drawings, to more fully explain the error of deep planting.

If we notice the appearance of vigorous trees, as they are naturally found growing, their roots will invariably be found near to, or upon, the surface of the ground, at the junction of the main roots with the trunk, as here represented, (*fig. 3,*)



so as to form a sort of mound upon which the tree appears to stand. This would seem to indicate, when we see thriving oaks an hundred feet high, and of proportionate size, that it should always be imitated in cultivation, for nature gives us useful lessons, and often points out

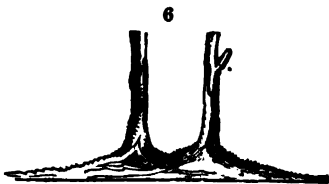
glaring defects. But this is not done: on the contrary, the trees are planted in prepared soil; perhaps a large hole, dug deep, and richly manured, and the soil thrown up as lightly as possible, and as the earth settles down, the roots will be an inch or two beneath the surface: and how many individuals plant in this manner, so as to have a hollow around the stem, to hold a pail or two of water. After a few years, if the soil has been cropped and manured, the trees will have the appearance of the annexed engraving, (*fig. 4,*) and the roots will be covered with four or six inches of earth. Now the best manner of guarding against this error, is to plant the trees at first, on raised mounds, as in *fig. 5,*



so that when the earth sinks around the roots, as it always will, they will still be two or three inches above the level of the garden. No trouble need be experienced about watering, as a

basin may be easily formed around the stem, by raising up a circle of earth, at the distance of a foot from the tree.

Thus, in a year or two, after the soil has become settled, the trees will appear as in *fig. 6*, and will present to the eye a much neater and more natural appearance; and, if care is taken, their vigor and health be maintained for a great length of time.



The soil around trees should never be cropped within a circle of four feet: by pursuing this course, and top-dressing with some good old manure every year, which may be lightly forked in, (not dug,) the trees may be kept in a healthy and fruitful state. It is important that this should be attended to; for it is one of the greatest errors of cultivators, to crop too near the stems of trees. The surface roots are cut off and destroyed, and they are thus prevented from obtaining nourishment, and, in consequence, have to seek it by penetrating further and deeper into the earth. It should be the constant aim of a good cultivator, to keep the roots of his trees as near the surface as possible, by the application of good manure, and by keeping the ground free from all weeds and crops of any kind whatever; if he is an attentive observer, he will soon perceive the great benefits which arise from such a course.

Trees must not be left to themselves after the operation of planting is over; the cultivator who thinks his labors end here, will be sadly disappointed in the abundance of his crops. Trees may thrive for a while, and arrive to a certain degree of productiveness, but after remaining in a kind of stationary condition a few years, a decline will take place, which is always sure to follow when they have been neglected: the crop soon becomes reduced—the growth less vigorous—the trees show signs of approaching age, and eventually become nearly barren of fruit. The only remedy, when trees become affected in this manner, is to take them up and replant them properly; if too large to remove, it is better to plant new trees and root out the old ones.

The cultivation of fruit trees is a subject upon which much information is needed, and one upon which a great deal may be written to advantage. The fact, that we find fruit trees as well as forest trees, springing up from the earth, making a vigorous and healthy growth, and attaining to a great size, without the aid of man, is no reason that he should leave them to themselves after they are once planted in the soil. All the choice

varieties of fruits have been produced by the skill of the horticulturist, from the crude stock which nature has placed in his hands, and they need his continued assistance, to prevent them from deteriorating into an inferior or worthless state.

Forest trees and shrubs require the same attention, as regards deep planting, as fruit trees; they are as easily affected by mismanagement, and though there is no crop of fruit to lose, no lover of garden scenery wishes to see them lingering along in a feeble and unhealthy state.

The production of new varieties by cross impregnation, grafting, budding, &c., and the renovation of trees, are subjects deserving of separate notice, and we shall endeavor to offer some observations hereafter upon each.

ART. III. *Remarks on the cultivation of the Filbert, (Corylus avenella var.)* By A. J. DOWNING, Botanic Garden and Nurseries, Newburgh, N. Y.

THE filbert is one of the finest nuts, and although great quantities of the fruit are imported, and sold in the fruit shops annually, there are scarcely any, as yet, cultivated in the United States. A sterile variety of the English filbert may be seen in many of our gardens, which rarely produces any fruit; but the finer sorts, which thrive luxuriantly, and bear most abundantly in this climate, are scarcely known in cultivation. Nothing can well be easier than the cultivation of this shrub or tree, and we are confident that were the merits of the better varieties generally known, no garden would be considered complete without them. A few years since, we imported small plants of the most celebrated English varieties, and have, without the least attention to pruning, realized quite an abundant crop of fine nuts, for two years past, which are quite an acceptable addition to the dessert.

Among the finest of these varieties are the *Frizzled*, the red Kernel, the Northampton Prolific, the Cobnut, and the

Cosford, (*fig. 7.*) We have found the Cosford, Frizzled, and the Northampton Prolific the most productive varieties, in this climate. All the varieties grow very vigorously in any good soil, naturally dry rather than moist, but a dry gravelly

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The Cosford filbert.

loam, or sandy loam, is considered preferable. In pruning and training filberts, the first most important requisite is to keep the main stem free from all suckers; and the second, to prevent too great a luxuriance of wood, which, if suffered to grow at random, will prevent the production of large crops. The nuts are produced, both upon the sides of the young wood, and upon lateral spurs, annually produced on the older branches, after the previous year's bearings lateral shoots have been trimmed away. Abroad, therefore, what is called the

spurring in system of pruning is adopted, and the extremities of the leading shoots are shortened every spring. This throws nearly all the vigor of the tree into the bearing branches, and produces a larger crop of fruit annually.

In some parts of England, large plantations of filberts are made, for profit. Kent is the most celebrated nut growing district, and the average crop there is about eight hundred weight per acre, although, in good soils and favorable seasons, thirty hundred weight have been raised on an acre of ground. The bushes are generally trained with single stems, and the heads pruned in the form of a hoop, kept about six feet high from the ground.

There does not appear to be the least obstacle to the profitable cultivation of the filbert on a large scale, in this country, and our dry fine summers would probably be found more favorable to the production of large crops, than the moist ones of England. A return of fruit is speedily received after planting on good soils, and we would, with confidence, recommend a trial of a filbert orchard, to enterprising cultivators.

In gardens, a row of the finer sorts of this fruit may be advantageously introduced, as a screen or barrier, in portions where such a feature is desirable, as the foliage is large and dense, and thus the double advantage of fruit, and privacy or protection, will be realized.

A. J. D.

ART. IV. *Some practical Observations on Planting Fruit Trees.* By J. W. RUSSELL, Superintendent at Mount Auburn.

THE planting of fruit trees, both for ornament and profit, has, no doubt, been more or less practised from the earliest period, in all civilized countries, and through successive generations, to the present time. If this be true, which I take for granted, a question may be asked, as follows:—What can be suggested that is new, or that is not already known, in the art of planting trees? My answer would be, nothing: for I

am willing to confess that all the knowledge which I have been able to obtain, in this delightful work of man, was, without doubt, well known and practised long before I became acquainted with the profession of a gardener. However, sensible as I am of the truth of my last statement, I still think that a great many individuals, who are in the habit of planting trees annually, have not yet obtained the requisite knowledge that will enable them to plant a tree in the best possible manner; therefore, I have been induced to make these observations, expressly for the perusal of those persons who are not already acquainted with this desirable art; and if no more than one individual should be able to glean a particle of information from them, which will be of service to him, my object will be in some measure attained.

The first consideration, in planting trees, is, to have a good foundation to begin upon, viz., a fertile soil; and the greater the depth, the greater will be the result. I shall suppose that an orchard of apple trees is to be planted the coming spring, where there is a depth of soil that will average from one to one and a half feet, and which is, at the present time, a grass field, or has been under tillage one or more years. If there is a stone wall around the field, there to remain, and not to be removed, instead of planting the whole, or part of the field, I should give the preference to the ground near the stone wall, for the planting of the trees, in the following manner, viz:—*twenty-one feet* apart in the row, and distant from the wall *eight or ten feet*. The great advantage of this method over that of field planting, is, that the whole of the ground will be clear for such uses as it may be judged will be the most profitable, and the fruit trees having been planted where I have proposed, the cultivator may rest assured that they have been placed in the situation which is the best adapted for their present and future welfare, and, consequently, where they will afford the greatest profit.

If the planting of the trees near the wall, or otherwise, be adopted, in either case the soil must be well prepared for their reception, by ploughing very deep, twelve feet in width, and the length as far as the wall extends, or the ground that is intended to be planted. If this had been done in the autumn, the frosts through the winter would meliorate the earth, and the planting would be performed with less labor in the spring. But if this part of the work has not been done, the whole can

be completed in the spring. I prefer ploughing the land as deep as it is practicable so to do, to the practice of digging out holes or pits, for reasons that I think will appear satisfactory to every one. First, the roots will have a greater range of ground to extend themselves in search of food and nutriment, which is indispensably necessary for their well doing. In three or four years the trees will speak for themselves, for they are great tale tellers if they do not receive due attention. Secondly, the ground between the trees will amply pay for the manuring, by cropping it with vegetables, three or four years after which period it may be laid down to grass.

But if planting in *holes* be deemed the most convenient method to pursue, be sure to have them opened more than twice as large as the roots of the trees will require at the time of planting; for the making of a small hole, and crowding the roots therein, and then stamping them down with your feet, is a sorry piece of work, and cannot be too much deprecated. If the fertile soil, in hole planting, be not more than a foot deep, take out at least six inches of the under strata, and replace it with the broken sods, well mixed with the best surface soil you have at hand, for it will be of much greater benefit to the tree at the bottom of the hole, than at the top.

Taking up the trees, for the purpose of replanting, is a part of the operation that needs great care and attention, in order to remove them without mutilating or breaking the roots. I have never seen a tree yet that I thought had too many roots, but, on the contrary, I have been frequently an eye-witness of those which have been divested of them by careless removal. A good method to be observed in digging up trees is, to begin at a proper distance from the stem, and take away the earth on one side first, and undermine the roots as much as possible; then go to the other side, and take off the surface soil carefully, so that it can be ascertained how the roots are situated, and with a little more exertion, it will be found that the tree may be easily taken out, on the side you first began your operations upon.

I now come to the final planting of the trees, supposing the ground to be in the best possible state for their reception. If they are to be brought from a distance, care must be taken to secure the roots from the *sun* and *drying winds*, which would have an injurious effect upon them; neither should the roots be allowed to be uncovered on the ground at the time of

planting; they should be taken only from the covering as they are wanted.

Having placed the tree in the situation allotted for it, by no means *deep* in the ground, (for it is much better to err in planting shallow than too deep,) begin to arrange the lower *tier* of roots by leading and spreading them out carefully and regularly, not placing one *across* another, but giving each root its natural position, having a man to assist, in order to steady the tree, and to give the earth as it is wanted; direct him to place the mould where the tree is held by the *hand*, which will be near the *trunk* where the *roots* issue from; then spread it evenly over the roots, and so proceed around the tree; this done, fill up with the earth until the next *tier* of roots is reached, and be sure to adjust it firmly with your *hands*, in order to be certain that there are no *hollow places* or *cavities* which have not been well *filled up*; arrange the roots as before, and cover them in the same manner as the first; and so continue on, bedding the roots in regular order, but more especially the small fibrous ones, *tier* after *tier*, until the whole are covered over two inches below the surface of the ground; then tread the earth gently around the tree, and work the surface over lightly with the spade, which will give it a finished appearance, and the operation is completed.

It will be perceived that treading and beating the earth solid upon the roots, more especially the small fibrous ones, is not recommended in these remarks, as the writer is of the opinion that the roots are very much injured by such foul treatment.

The same system of planting is recommended for forest trees, only the tops should not be pruned like a bean pole, but in a conical form, or as nearly resembling the shape of the Lombardy poplar as possible; the branches only to be shortened, and not cut off close to the main stem.

J. W. RUSSELL.

Mount Auburn, Cambridge, Jan. 1841.

Our article in a preceding page, was sent to press before Mr. Russell's came to hand. His remarks are worthy of attention, as being the result of many years' experience in the planting of trees. It will be seen that he guards the cultivator against deep planting.—*Ed.*

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

To prevent worms from getting into pots in frames or pits.—Take the following quantity of lime, fine gravel and sand, which may be mixed into a concrete thus:—Two barrow loads of gravel, one barrow load of sand, and one bushel of lime, which must be ground small previously: let it be mixed tolerably wet, and be used as quick as possible, to prevent its setting before you get it into your pit or frame; cover the bottom over, and, as the process goes on, form a small channel in the concrete along the front, to carry off the superfluous water after watering the plants. The channel may be formed by sliding a long piece of wood along the surface. Having spread the above quantity about an inch and a half thick, excepting the front where the channel is, it should be a little thicker, having had a little mould taken out previously to allow for it; then sprinkle a little dry lime over with the hand, and give a light sprinkle of water, after which level the surface with the back of the spade: this will cover about sixty square feet. The above quantity is most convenient for mixing at once, as it requires to be done with the greatest activity.—(*Gard. Gaz.*)

Destruction of wood lice.—This insect is often troublesome in frames and hot-beds, and does much injury to the plants: the following method of destroying them, which we find in the *Gardener's Gazette*, may be useful to our readers. The writer had always observed that wood lice were to be found very numerous amongst fusty mouldy hay, and half rotten, short, dry, grass, (the latter he found most attractive,) and it struck him, that if he set traps about his green-houses, frames, hot-beds, &c., baited as described below, he should be successful in destroying them. His plan was as follows:—“My method is to get full sized No. 60 pots, [our No. 2:] stop the bottom; half fill them with mouldy, but dry, grass; lay the pots on their sides, in different corners of my house, frame, &c.; look at them morning and evening; give the grass a shake; give them a good hard rub round the pot, so as to break every bone they have in their skin; lay the trap ready for the next batch. I find the above remedy, with the assistance of a toad or two, to pick up the stray ones, the most effective method that I have seen practised. A correspondent observes that he has found them easily destroyed by keeping a frog or two inside. I do not hesitate to say but frogs will destroy wood lice and other vermin, but in warm, moist situations, they make rather too free for me, in exercising their abilities in leaping and jumping, &c. If you have a tender plant, either in house or frame, it is not safe to trust frogs with it, for they are most certain to have a jump at it, or get perched upon the top of it.” [We have found this to be the case, and have frequently had them burrow under the

soil so as to destroy a plant, and nine times out of ten, it happens to be the choicest one of the whole. Toads do very well, where there are no very delicate plants, but when there are, we should advise a trial of the old grass in pots, as noticed above.—*Ed.*]

Seedling Tulips.—Mr. Groom's method of growing seedling tulips, is as follows:—The seed is sown about the end of November, in preference to sowing earlier, as those sown in August come forward early, and the foliage is so far advanced that it generally damps off during winter. The seeds are sown in a pot of rich sandy loam and peat, and is placed in a cool frame, taking care to keep the soil just moist. When the plants have completed their growth, he transplants them very carefully, at a suitable distance apart. At the second time of planting out, they are planted in the open bed, as done to established kinds. The period before blooming depends usually upon the treatment given; sometimes they bloom the fourth year, and break at the sixth or seventh. (*Floricultural Cabinet.*)

ART. II. *Foreign Notices.*

ENGLAND.

New Dahlias, and Dahlia Exhibitions.—A great number of new dahlias are advertised for the coming season, by the most celebrated cultivators around London, and many of them at enormously high prices. Indeed, there are so many which are stated to be *first rate*, that it is difficult to make a selection, unless the purchaser is guided by the number of premiums which the flowers have gained at the fall exhibitions. The weather was not favorable to the blooming of the dahlia, in the early part of last season, and there was a greater scarcity of fine specimens than in previous years. The same disappointment has been experienced in the new kinds sold out for the first time last spring, at high prices, that has been experienced here, and amateurs are becoming more and more careful in their purchases upon the mere recommendation of the grower or seller. The *Gardener's Gazette*, of October last, in commenting upon the subject, speaks as follows, in relation to the new flowers now advertised for the spring trade:—

“The new flowers to be let out next year, we presume, will be all charged half guineas, and puffed up as *first rate*, although scarcely a dozen really deserve that distinction: indeed, under the present state of things, it would be nothing short of condemning a man's own flowers, to offer them at any thing less. It is, however, highly desirable, that a new and more honest mode of letting out seedlings should be adopted. None should be offered as *first class*, but such

as have obtained first class prizes, at several of the London or leading provincial shows, when it may be presumed that they have been seen and approved by competent and impartial judges. Others, having in perfection only two or three qualities, may yet be desirable, and worth a place in stands of fifty or one hundred, yet should not be placed on a level with the best flowers: such might be let out at seven and sixpence or five shillings; and if fairly described, and accredited by the censors who had awarded prizes to them, would find a ready sale, and the public confidence be maintained: whereas, by the grossly exaggerated statements constantly put forth, amateurs of the dahlia will grow tired of being over and over again deceived into the purchase of worthless varieties, and the dahlia sink from the rank it has so long held in public estimation, as a florist's flower."

These remarks are perfectly correct: nothing has done so much to discourage amateurs from purchasing the new sorts, as the great disappointments which they have experienced in years back: new sorts are *cracked up*, to use a common phrase, as surpassing any of those which have preceded them, and are sold at the highest prices: but when they come into bloom, they have, in four cases out of five, proved little or no better, and, in many instances, not near as good, as the old sorts, which have been some time under cultivation. Amateurs have been disgusted with the deception which has been practised: they are willing to pay well for fine kinds; but to lose their money and their labor, and, in the end, be rewarded with only a few inferior blooms, is taxing them too severely. A reaction, in consequence, takes place; they refuse to purchase high priced ones at all, and cultivate only the older kinds; they soon become less interested from the continued growth of the same sorts, and eventually give up the cultivation of the dahlia. On the contrary, if the amateur purchases a few high priced flowers, and they prove of superior beauty to any he possesses, it creates a desire to add others, and every season, as his taste increases, his desire to possess the newest will be greater. The interest in the dahlia will then be kept up.

We could name several new kinds which have been imported, and sold at high prices to our amateurs, but very few of them would now be tolerated in a collection. Some of them cost as high as £5. 5s., (or \$25,) not two years ago, but they would not now bring fifty cents each. These very kinds, however, were stated to be the very finest in England, were figured in the periodicals, and obtained premiums at several of the exhibitions of the flowers. So signal have been the failures, that amateurs can hardly be persuaded that their future efforts will not be attended with like results.

The exhibitions for the fall are all over, and we have reports from several of the most prominent provincial societies. We have not room, however, to go into a detail of the names of all which have gained prizes; but we shall select a few of the leading premiums, from the several societies, to show in what estimation the flowers are held. This will as well be perceived from an enumeration of the premier prizes of each of the exhibitions, as if we were to give the whole reports.

The following are the names of the societies, the reports of which we give below, viz. The North London Amateur Floricultural Soci-

ety; The Sheffield Horticultural Society; Grantham Floral and Horticultural Society; Analaly Annual Dahlia Show; Stowmarket Horticultural Society; Morningside Practical Gardeners' Society; Bedford Grand Dahlia Show; Kingston Royal Horticultural Society; Elham Horticultural and Floral Society; York Horticultural Exhibition; Exeter Grand Dahlia Exhibition; Hexham Floral Exhibition; Hampstead Florists' Society; Wrexham Horticultural Society; Birmingham Grand Dahlia Show; in all fifteen, and among them some of the most influential provincial societies.

The North London Amateur Floricultural Society.—First prize, a silver cup, value six guineas.—Best fifty blooms, viz:—Widnall's *Argo*, Cambridge Hero, Conductor, Duchess of Devonshire, Ne Plus Ultra, Rienzi, Sylph, Pickwick, Nicholas Nickleby, Defender, Cox's *Defiance*, Bishop of Salisbury, Sir J. Astley, Beauty of Wadsworth, Plot, Climax, Diana, Unique, Hedley's Perfection, Martha, Amato, Bayadere, Duchess of Richmond, Countess of Pembroke, Springfield Rival, Penelope, Dodd's Mary, Grenadier, Warminster Rival, Lewisham Rival, Advancer, Beauty of the Plain, Egyptian Prince, Springfield Major, Bloomsbury, President of the West, Windmill Hill Rival, Hylas, Hope, Miss Johnson, Lady Bathurst, Rival Sussex, Royal Standard, Hon. Stuart Wortley, Grace Darling, Francis, Mrs. Newby, and Phenomenon—to Mr. Widnall.

The Sheffield Horticultural Society.—Best twenty-four dahlias, viz:—Ovid, Alpha, Topaz, Dodd's Mary, Essex Rival, Knight's Victory, Miss Scroope, Model of Perfection, Cox's *Defiance*, Grace Darling, Calliope, Hope, Climax, Duchess of Richmond, Unique, Duchess of Kent, Marquis of Lothian, President of the West, Eva, Rival Sussex, Lewisham Rival, Nicholas Nickleby, Contender, and Conductor—to Mr. J. Atkinson.

The Grantham Floral and Horticultural Society.—Best twenty-five blooms, viz:—Knight's Victory, Horwood's *Defiance*, Miss Scroope, Conductor, Lady Dartmouth, Perfection, Ovid, Diadem of Flora, Lady Kinnaird, Advancer, Bowling Green Rival, Duke of Devonshire, Hope, Topaz, Wonder, Eva, Standard, Springall's Conqueror, Climax, Glory of Plymouth, Bontisholl, Seedling, Duchess of Devonshire, Marquis of Lothian, Virgin Queen—to Mr. Shepherd.

The Analaly Annual Dahlia Show.—Best twenty-four blooms, viz:—Utopia, Essex Rival, Grace Darling, Parsons's New, Squibb's *Defiance*, Ward's Mary, Bloomsbury, Hope, Rufus, Eva, Robert Newton, Robertson's Julia, Bayadere, Horwood's *Defiance*, Cox's *Defiance*, Mackenzie's Perfection [American seedling,] Pickwick, Bree's Rosa, Duchess of Richmond, Windmill Hill Rival, Nicholas Nickleby, Landmark, Miss Johnson—to Forsyth & Ward.

The Stowmarket Horticultural Society.—Best twenty-four blooms, viz:—Model of Perfection, Cox's *Defiance*, Nonpareil, Contender, Optime, Bloomsbury, Pumpkin's Charles XII., Lady Middleton, Amulet, Ruby, Countess of Pembroke, Independent, *Argo* (Widnall's,) Grace Darling, Rienzi, Rouge et Noir, Diana, Suffolk Hero, Ne Plus Ultra, Gesnerie, Nicholas Nickleby, Duchess of Richmond, Lady Bathurst, Seedling 207—to Mr. S. Girling.

Morningside Practical Gardeners' Society.—Best twelve blooms, viz:—Hope, Horwood's *Defiance*, Unique, Virgin Queen, Amato,

Cox's Defiance, *Essex Rival*, *Marquis of Lothian*, *Climax*, *Beauty of the Plain*, *Lady Douglass*, and *Evans's Wallace*—to *John Dourrie*, gardener to *Gen. Robertson*.

Bedford Grand Dahlia Show.—Best thirty-six blooms, viz:—*Grace Darling*, *Hope*, *Eva*, *Suffolk Hero*, *Calliope*, *Napoleon*, *Seedling*, *Virgin Queen*, *Royal Standard*, *Edith Plantaganet*, *Unique*, *Conductor*, *Hedley's Perfection*, *Diomede*, *Springfield Rival*, *Miss Johnson*, *Essex Rival*, *Defender*, *Ne Plus Ultra*, *Cox's Defiance*, *Victory*, *Vitruvius*, *Contender*, *Dodd's Mary*, *Maresfield Rival*, *Bloomsbury*, *Purple Perfection*, *Cambridge Hero*, *Ringleader*, *Rienzi*, *Bree's Rosa*, *Warminster Rival*, *Pickwick*, *Rienzi*, *Pavonium*, *Henrietta*, *Rose of Nottingham*—to *Mr. Shepherd*.

Kingston Royal Horticultural Society.—Best twenty-four blooms, viz:—*Compte de Paris*, *Sir William Middleton*, *Hope*, *Victory*, *Nicholas Nickleby*, *Springfield Purple*, *Danecroft Rival*, *Unique*, *Bloomsbury*, *Cox's Defiance*, *Grace Darling*, *Primrose*, *Pilot*, *Henrietta*, *Ne Plus Ultra*, *Rose*, *Rienzi*, *Bishop of Winchester*, *Queen of Sarum*, *Amato*, *Virgin Queen*, *Essex Rival*, *Climax*, *Grenadier*—to *Mr. Gaines*, nurseryman.

Elham Horticultural and Floral Society.—Best twelve blooms, viz:—*Glory of Plymouth*, *Invincible*, *Grand Turk*, *Frances*, *Essex Rival*, *Cox's Defiance*, *Widnall's Argo*, *Hope*, *Hylas*, *Queen of Sarum*, *President of the West*, *Beauty of the Plain*—to *Rev. C. Oxenden*.

York Horticultural Exhibition.—Best twenty-four blooms, viz:—*Bishop of Winchester*, *Dohn John*, *Bloomsbury*, *Grace Darling*, *Maresfield Rival*, *Miss Scroope*, *Rosetta*, *Beauty of Avon Vale*, *Dodd's Mary*, *Essex Rival*, *Danecroft Rival*, *Horwood's Defiance*, *Widnall's Argo*, *Duchess of Portland*, *Conductor*, *Invincible*, *Cox's Defiance*, *Climax*, *Amato*, *Fireball*, *Miss Johnson*, *Suffolk Hero*, *Mackenzie's Perfection*, and *Pickwick*—to *Mr. Edwards*.

Exeter Grand Dahlia Exhibition.—Best forty-eight blooms, viz:—*Climax*, *Hornsey Surprise*, *Amato*, *Bloomsbury*, *Essex Rival*, *Vitruvius*, *Rosa*, *Lady Middleton*, *Queen of Sarum*, *Lord Morpeth*, *Hylas*, *Monarch*, *Dodd's Mary*, *Bontisholl*, *Grace Darling*, *Rosetta*, *Sir H. Fletcher*, *Grenadier*, *Bishop of Salisbury*, *Maresfield Hero*, *Bishop of Winchester*, *Squibb's Defiance*, *Phenomenon*, *Duchess of Portland*, *Regina*, *Cox's Defiance*, *Beauty of the Plain*, *President of the West*, *Metella*, *Countess of Pembroke*, *Coronal*, *Juno*, *Unique*, *Egyptian King*, *Rienzi*, *Mr. Neeld*, *Windmill Hill Rival*, *Hero of Nottingham*, *Nonpareil*, *Advancer*, *Lady Bathurst*, *Chef d' Ouvre*, *Defender*, *Springfield Rival*, *Nicholas Nickleby*, *Hedley's Perfection*, *Queen of England*—to *Messrs. Veitch & Son*, nurserymen.

Hexham Floral and Horticultural Society.—Best twenty blooms, viz:—*Widnall's Argo*, *Grace Darling*, *Virgin Queen*, *Amato*, *Thurteill's Meteor*, *Primrose* (*Gaines's*), *Ovid*, *Anna Augusta Broadwood*, *Rienzi*, *Lewisham Rival*, *Nicholas Nickleby*, *Rival Granta*, *Pilot*, *Marchioness of Lansdowne*, *Springfield Rival*, *Topaz*, *Hedley's Perfection*, *Rival Sussex*, *Windmill Hill Rival*, *Egyptian King*—to *T. Aitchison*, gardener to *T. W. Beaumont, Esq.*

Hampstead Florists' Society.—Best twenty-four blooms, viz:—*Marchioness of Lansdowne*, *Hope*, *Topaz*, *Lewisham Rival*, *Suffolk Hero*, *Virgin Queen*, *Egyptian Prince*, *Climax*, *Grace Darling*, *Cow-*

en's Pearl, Unique, Cowen's Pompous, Rival Sussex, Miss Masters, Purple Perfection, Sir H. Fletcher, Dodd's Mary, Ne Plus Ultra, Rienzi, Charles XII., Eva, Middlesex Rival, Knight's Victory—to Mr. Garrod.

Wrexham Horticultural Society.—Best twenty-four blooms, viz:—Metropolitan Perfection, Duchess of Portland, Topaz, Purple Perfection, Duchess of Devonshire, Suffolk Hero, Mr. Neeld, Russian Gladiator, Annot Lisle, Countess of Pembroke, Marquis of Lothian, Dodd's Mary, Grace Darling, Blandina, Advancer, Stuart Wortley, Vitruvius, Beauty of the Plain, Mungo Park, Sykes's Diana, Cox's *Defiance*, Napoleon, Unique, Bontisholl—to Mr. Bernard.

Birmingham Grand Dahlia Show.—Best twenty-four blooms, viz: Hylas, Cambridge Hero, Queen of Sarum, Grace Darling, Bloombury, Duchess of Richmond, Regina, Hope, Sykes's Diana, Marquis of Lothian, Nicholas Nickleby, Essex Rival, Suffolk Hero, Lady Deacon, Horwood's *Defiance*, Eva, Lady Middleton, Girling's Contender, Windmill Hill Rival, President, Ne Plus Ultra, Windsor Rival, Widnall's *Argo*, Unique—to Mr. Bragg, of Slough.

It will be seen that we have italicized the names of Widnall's *Argo*, and Cox's *Defiance*; this has been done to show more readily the number of prizes which each have gained. They were both brought out last year, and were called the "Rival Yellows," from the fact that both Mr. Widnall and Mr. Cox exhibited the blooms in considerable numbers, in the fall of 1839, and there was a difference of opinion respecting their merits; each of them undoubtedly fine flowers, but some claiming for Mr. Widnall's the best properties, while others alleged that *Defiance* was the best and most constant bloomer. So far as we are able to form any judgment, between the number of prizes gained by both, and what has been stated in the *Gardener's Gazette* and *Horticultural Journal*, we are inclined to think that there is little choice between them, and that *Argo* is full as good a flower to rely upon as *Defiance*. The latter was cultivated by an amateur, in the vicinity of Boston, last season; it flowered tolerably freely, but there was not a bloom upon it fit to be shown; a majority of them were single and semi-double. The coming season will set the matter at rest: our opinion is, that there is no choice.

It will also be observed, that among the dahlias which gained the premiums, none were more successful than Ansell's Unique, Suffolk Hero, Eva, Hope, Springfield Rival, and Dodd's Mary. Ansell's Unique has been particularly successful, and has taken the prize in the yellow class, when shown in single blooms, over Widnall's *Argo*. Suffolk Hero and Eva are in almost every stand, from the class of one hundred, through all the stands of fifty, thirty-six, twenty-four, twenty, eighteen, twelve, nine, six, three, to a single bloom. Mackenzie's Perfection, a flower we have always grown and admired, has been in some of the best stands, as will be seen above: no American dahlia ever raised, possesses as good a form as Perfection; if the color was better, it would stand almost unequalled. Hedley's Perfection, which our cultivators have not been able to bloom at all, has been placed in a great number of the winning stands; this should encourage amateurs to try it another season. Gaines's Primrose, which was admired at the dahlia show of the Massachusetts Horti-

cultural Society, last fall, does not appear to have gained but very few prizes. Rienzi, Marquis of Lothian, Duchess of Richmond, Sir H. Fletcher, Blandina, Rosetta, Topaz, Victory, have been very successful flowers, and cultivators should not give up a great many of the old ones for the *new ones*, which are so highly praised, but two thirds of which prove worthless. A great number of the dahlias which were sold out in England, last spring, at £10 and £5 for dry roots, and 10s. 6d. and 7s. 6d. for pot plants, will be thrown wholly out of cultivation another season. It is folly for amateurs who grow only forty or fifty plants, to discard good old ones, to make room for varieties which they know nothing of, only from those who are interested in selling the plants.

Among the new varieties brought out last spring, which appear to have successfully competed for prizes, are the following:—Lee's Bloomsbury, Widnall's Argo, Cox's Defiance, Beauty of the Plain, Pickwick, Danecroft Rival, President of the West, Whale's Phenomenon, Bishop of Winchester, Windsor Rival, Rouge et Noir, Countess of Pembroke, Dodd's Grace Darling, Windmill Hill Rival, Nicholas Nickleby, Girling's Contender, Miss Johnson, Bree's Rosa, Metella, &c. These, we believe, can be relied upon as first rate flowers. Probably not a half a dozen others are equal to the older varieties.

A large number of varieties are advertised to be let out in the spring, and many of them at high prices for dry roots. A few have been successful in gaining prizes as seedlings, but a majority of them have no other recommendation than that of the grower. Several of the provincial societies have refused to award prizes to seedlings, unless they possessed properties much superior to the old sorts: and if all the societies should pursue the same course, and the public purchase only such as have been successful flowers, cultivators would not be subjected to the disappointments which so often take place.

The names of some of the new varieties, now for the first time sold out, in dry roots, are as follows, with the prices annexed:—Cox's Revenge, brimstone yellow, £10; Maid of Bath, white, tipped with purple, £10; Beauty of the Village, maroon, £10; Burnham Hero, dark crimson, £10; Widnall's Eclipse, scarlet, £10; Scarlet le Grand, scarlet, £6; Wheeler's Maria, rose, £4; Walters's Unique, white, with lavender edge, £5; Tyler's Speedwell, primrose, £10; together with many others at £3, £2, &c. Plants delivered in May will be 15s. to 10s. 6d. each.

A writer in the same paper we have been quoting from, has given a list of *fifty-three* of the very best dahlias, cultivated in England last year, the names of which are as follows:—

*Duchess of Richmond, *Springfield Rival, Duke of Wellington, Beauty of the Plain, *Lewisham Rival, *Hope, *Glory of Plymouth, Egyptian King, Hylas, *Royal Standard, Robert Burt, Le Grand Baudine, Nicholas Nickleby, Amato, Cox's Defiance, Ovid, *Knight's Victory, *Ne Plus Ultra, Sussex Rival, Metella, Conservaive, Bloomsbury, Advancer, Windsor Rival, Queen of England, Grace Darling, Maria, *Rienzi, President of the West, *Suffolk Hero, *Conductor, *Unique, Widnall's Argo, *Purple Perfection, Climax, Diomedes, Ruby Superb, *Contender, Miss Johnson, Sir Fred. John-

stone, Sully, Bowling-green Rival, Donna Anna, Francis, *Eva, Rouge et Noir, Penelope, Ruby, Horwood's Defiance, *Essex Rival, Rival Granta, Annot Lisle.

Those marked thus, *, which are nearly all that have been cultivated in this country, we have proved to be first rate varieties, and such as will bear the writer out in his recommendation; if the others are equally as fine, the list is as complete as one could be made. Most of the kinds named will be offered for sale the coming spring, and amateurs may possess them, if they wish.

Our readers, especially amateurs of the dahlia, may gather from these remarks, the progress which has been made in the cultivation of dahlias during the past year. Probably many of the finest will be introduced and offered for sale; but we would caution our friends against purchasing new kinds because they cost high in London; we would rather advise them to rely on such old and sterling sorts as Suffolk Hero, Eva, Hope, &c., and to grow several plants of each of these, rather than a hundred or more of worthless flowers.—*Ed.*

Cultivation of the Nelumbium speciosum.—A communication was read at a late meeting of the London Horticultural Society, by Mr. Scott, gardener to Sir George Staunton, upon the cultivation of the *Nelumbium speciosum*. Mr. Scott has been very successful in blooming several plants, and the Society requested him to communicate his method for publication. The substance of it is as follows:—The plants were kept dry in the winter till the month of February, in a house at the temperature of 50°: they were then divided, and removed to a stove kept at 80°, with a bottom heat supplied to the soil by water kept at 90°. In May, they were placed in a box of loamy soil, covered with water at 80°, and the temperature of the house ranging from 65° to 95°, when they threw up flowers in the month of August, measuring about ten and a half inches in diameter, of a bright red color, and much handsomer than the *N. luteum*.—*Ed.*

Davis's Maid of Bath dahlia.—The whole stock of this new dahlia has been disposed of by Mr. Davis, to a nurseryman, for one hundred guineas, a very handsome sum. Mr. Davis, however, was very modest in his price, as we notice that Mr. Cox, the grower of Revenge, demands 500! guineas for the whole stock of that variety. If he finds a purchaser he will be a lucky man, and will soon make his fortune at raising seedling dahlias. His *LADY SONDES* sold for £5 for dry roots, the price we paid ourselves, and a large number of roots were disposed of; but it proved a *worthless flower*, and every purchaser was cheated out of his money, and the public induced to cultivate a dahlia which we do not believe ever produced a perfect bloom, at least, not in this country. The *Maid of Bath* has been tolerably successful in gaining prizes, and may prove a fine dahlia.—*Ed.*

Fruit trees affected by the subsoil.—A collection of apples, of one hundred kinds, was lately exhibited at the October, (1840,) meeting of the London Horticultural Society, by Mr. Crace. In a letter accompanying the fruit, Mr. Crace states "that having planted the trees in new ground, brought in for the purpose, he found that wherever the roots penetrated deep, into the subsoil, the trees would canker: he therefore grafted on French Paradise stocks, which do not

produce such strong, coarse, bundles of roots as the common crab, or other stocks, but fine fibrous roots, which run along just below the surface." Is not this the reason why dwarf trees in many instances produce better fruit than standards?—*Ed.*

Grafting pears on the mountain ash.—At a meeting of the London Horticultural Society, Dr. Lindley read a communication received from R. A. Hornby, Esq., containing some observations on the grafting of pears on the mountain ash. Mr. H. states, that it lately came under his notice, while staying in Switzerland, where he found it to be very generally practised, and with great success, the crops being both abundant and sure, in a climate and site (on the high plateau of the Tanur mountain, with a poor and shallow soil,) where neither pear nor apple would previously fruit, the effect being to retard the blossoms and give vigor to the constitution. Neither the flesh nor flavor of the fruit was said to be at all affected; budding or grafting being alike successful on either old or young stocks by the usual process. Great care must however be taken that none of the young shoots which the stocks may make, during the first season after working, be removed; in the succeeding spring, however, before vegetation commences, all such redundant growth should be cut out closely, and the graft alone be permitted to push in freedom. Its growth will then be luxuriant.

A note on the above communication, by Mr. R. Thompson, under gardener in the Society's orchard, was also read, in which he states that the mountain ash was one among the various kinds of stocks on which the pear was grafted at the Society's garden, on which subject the following observations were made:—

The trees grew very well, but scarcely so vigorously as those on the pear stock, or even on the quince. The fruit was produced at an earlier age of good size; there was no perceptible difference in the flavor, when compared with those produced under similar circumstances, but on the pear stocks, nor was it observed that the blossoms were at all retarded. The trees did not appear as if they would be long-lived, owing to the unequal swelling of the respective species. The pear increased in diameter more rapidly than the mountain ash. Still, as the latter species is much hardier than the quince, and would thrive in almost any soil, it might be advantageously used in some situations.—(*Newspaper.*)

[M. Floss, in the *Transactions of the Prussian Gardening Society*, (1829,) has communicated a notice of the plan of grafting on the mountain ash. He states that the trees thrive in a sandy soil, that the fruit keeps better, but is not quite as good flavored as when growing on the wild stock. The pear stock is prevented from increasing in diameter over the ash, by leaving one or two branches on the latter, which takes a portion of the sap from the grafted stock. There does not appear to be any advantage arising from the practice, except the capabilities of the ash thriving on light, sandy soils, where the wild pear stock will not make any growth.—*Ed.*]

Myatt's Eliza Strawberry.—This is the name of a new variety, raised by Myatt, which is stated to possess fine qualities. We shall mention it under the head of our Pomological Notices, in a future number.

ART. III. Domestic Notices.

New Carnations.—Mr S. Walker, of Roxbury, has been importing some superior carnations. He received several plants by one of the steam packets, last autumn, which made the passage in fourteen days, and he informs us that a large part of them are alive, and in good condition. Among the varieties are some of the most choice, and we may therefore congratulate our friends, and in particular the lovers of the carnation, that there is now some chance of adding this beautiful and fragrant, and much sought after plant to our gardens. Nearly all the attempts which have heretofore been made to import the carnation by the packets, have proved unavailing: the great length of time the plants were packed up and confined to the temperature of the vessel, has almost invariably destroyed them. In the steam packets, the period of confinement is shortened to sixteen or seventeen days, or less, during which time, if the plants are strong, and well packed, scarcely one out of a hundred would be lost. We shall look forward with some anxiety to the coming season, which, we doubt not, will reveal to us some splendid flowers, the production of Mr. Walker's plants.—*Ed.*

Cemetery in Lowell.—The number of these rural places of burial is rapidly increasing. A bill has been passed by the Legislature, incorporating a company for the purpose of laying out a cemetery in Lowell, Mass. This flourishing town now numbers upwards of twenty thousand inhabitants, and we are glad to see so much public spirit manifested upon the subject. The Middlesex Horticultural Society, organized in 1839, and which has only held a few shows, is exerting a salutary influence in promoting the advancement of horticulture.—*Ed.*

Horticultural Society in Louisville, Ky.—A horticultural society has lately been formed in Louisville, Ky. There is already an increasing taste for horticultural pursuits in and around Louisville, and the formation of a society, by the means of occasional exhibitions, will have a tendency to rapidly increase the interest which is taken in the cultivation of plants and fruits.

The society was organized in December, by the choice of the following officers:—

Edward D. Hobbs, *President*; G. W. Anderson, *Vice-President*; M. M. Henckle, *Secretary*; James George, *Treasurer*; Edward Wilson, J. S. Bell, Henry Griswold, L. Young, and James W. Hemming, *Executive Committee*.—*E. W., Louisville, Ky., Jan. 1841.*

Horticultural Society in Indiana.—A society has also been established at Indianapolis, Indiana, where the annual meeting is to be held. The constitution is similar to that of the Massachusetts Horticultural Society. Officers are elected on the first Wednesday in January.—*Ed.*

Brussels Sprouts.—This excellent vegetable is rarely or never seen in our markets: it is as easily cultivated as the cabbage, and is far preferable at this season of the year. Some beautiful specimens

were lately shown at the rooms of the Massachusetts Horticultural Society, from John Prince, Esq., of Roxbury. They were two and a half feet high, and were covered with the small sprouts or heads, from the base of the stem to the top. Mr. Dunn, gardener to Dr. J. C. Warren, of Brookline, also grows them in considerable quantities, and they are preferred to cabbages, for spring use.—*Ed.*

Lectures on Agricultural Chemistry.—Dr. Dana, of Lowell, proposes to deliver a course of lectures in Boston, on Chemistry as connected with Agriculture, in case he should be able to procure a sufficient number of subscribers. Papers are open, for the signatures of gentlemen interested in the subject, at the seed stores of Messrs. Hovey & Co., J. Breck & Co., and C. P. Bosson. We hope that a sufficient number of names will be obtained to induce Dr. Dana to begin the course. He is well acquainted with the subject, and his lectures would afford much valuable and important information.—*Ed.*

Agricultural Meetings at the State House.—The Agricultural Commissioner has commenced his third course of meetings of farmers, and others interested in agriculture, at the State House, which are held weekly, on Thursday evenings. The meeting was organized for the season, on Thursday, January 24th, by the choice of Hon. Daniel P. King, of Danvers, *President*, and Rev. Allen Putnam, *Secretary*, with a *Committee of Arrangements* composed of twelve gentlemen. The cultivation of grains was the subject for discussion. These meetings are the means of eliciting much useful information, and tend to create a greater interest in farming.—*Ed.*

New variety of the Heliotrope.—Mr. Sleath, gardener to Mr. Longworth, of Cincinnati, Ohio, has raised a seedling heliotrope, which is stated to surpass either of the species which are cultivated in our collections, viz: the *H. grandiflora* and *peruvianum*. It is a most abundant flowerer.—*Ed.*

A collection of seeds has been received at the Public Garden, from Dr. Biasoletto, Director of the Botanic Garden of Trieste. It contains about four hundred varieties, nearly or quite all of which are new here, and embracing objects of interest to the botanist, floriculturist, and agriculturist. Among the number, are forty species of *grasses*, new in this country, and perhaps some of them may prove valuable acquisitions to the agriculturist. The seeds will all be planted, in order to see what they are, and botanists and florists will have an opportunity of examining them when they come into flower. Mr. Teschemacher also informs us that he has received upwards of five hundred dried specimens of plants, from Dr. Biasoletto, and among them are some splendid flowers.—*Ed.*

Seedling Cactuses.—Mr. Sleath, gardener to Mr. Longworth, Cincinnati, has several hundred hybrid seedlings, from which it is expected that some beautiful new varieties will be produced.—*Ed.*

New seedling Potato.—My potato fully answers my expectations: it is a fine early variety, and grows large for so early a potato. I shall have them for sale in the spring.—T. H., Burlington, N. J., Jan. 1841.

Peach trees in New Jersey.—My peach trees are all alive, and not

in the least destroyed by the winter. The prospect now is, that there will be an abundant crop.—*T. Hancock, Burlington, N. J., Jan. 22, 1841.*

ART. IV. *Retrospective Criticism.*

Culture of Euphórbia Poinsettii, Amaryllis, Cactuses, &c.—Mrs. H. M. B. would respectfully request of Mr. Hovey some instructions to procure a bloom of the *Euphórbia Poinsettii* and *splendens*, in as early a number of your very useful and excellent Magazine as convenient. I have, in various methods, tried my ingenuity, and the advice of others, but in vain: I have been disappointed in blooming the *Poinsettii* as I saw it in Mr. Buist's green-house, Philadelphia, from whom it was purchased.

Will the editor also notice the treatment of the *amaryllis*, *daphne*, *acacias*, *carnation pink*, and *cactus*, all of which have already, in former numbers, probably, (not having the December number by me at present, for reference,) been treated of under their proper heads? the only apology I can offer for the request being in the fact of your Magazine having reached the fifth volume before it was brought to my notice; and although further remarks on the subject may be unnecessary to the experienced florist, whether public or private, yet to a young beginner, like myself, very acceptable, who cultivate a few flowers for their own pleasure, and I should add for their friends, many of which I have had bloom splendidly, particularly *Cereus grandiflora*, *splendens*, *speciosa*, and *Epiphyllum truncata*, the latter still in fine bloom. I would I could say as much of *C. Jenkinsonia*, *speciosissimus*, and *flagelliformis*, or creeping *cereus*: the three latter have tried my patience not a little, and Virginians are not at any time overstocked with the virtue of good old Job.

The *Eyriestii* is noticed by you as a fine variety: is it a very distinct one, and the treatment the same as the others of the *cactus* tribe? Is there such a variety as the pure white, except the *grandiflora*? Many thanks for the chapter on the summer treatment of flowers, which I hope will be continued, with all the little detail which characterizes that already given, for a reason already stated, particularly as your remarks coincided, I regret to say, with my own experience. Strange as it may seem, I rarely lose a plant in the winter, but our hot suns make sad havoc with many a cherished plant, and this not so much for want of attention as a little experience, and some direction as to the proper situation of the plants, keeping them, I fear, now too much shaded.

I have been requested, by a gentleman of my acquaintance, to make some inquiries respecting the work of the Abbe Berlése of

Paris, on the camellia—is it printed in English?—the price, &c. The Editor will also please give what information he can respecting the work of the Misses Loudon on bulbous rooted plants.—*H. M. B., Winchester, Va., Jan., 1841.*

[In our former volumes articles have appeared on the cultivation of the *Euphórbia Poinsettii*, (II., p. 58,) the *amaryllis*, (I., p. 323,) the *daphne*, (I., p. 296,) the *carnation pink*, (II., p. 329,) and the *cactus*, (II., p. 170, and III. 331.) As these communications have given a detailed account of the treatment of the several plants, and as a majority of our readers possess all the volumes of the Magazine, we have deemed it unnecessary to occupy our pages with the same information again, unless offered by some of our correspondents who may be more successful in their treatment of them, and have some superior knowledge respecting their cultivation. To our former volumes we would therefore refer Mrs. H. M. B., for complete information upon the subject. The first five volumes contain a great amount of horticultural, floricultural and botanical matter, and should be in the possession of every amateur florist. But as our correspondent has not the volumes which contain the information sought after, we will, in as condensed a manner as possible, notice the proper treatment of those which she has named above: we would, however, invite our correspondents to send us communications upon the cultivation of these several plants, for the particular benefit of those who do not possess the earlier volumes of the Magazine.

Euphorbias should be treated very similar to *geraniums*. The plants should be cut in in May, and turned out of the pots into the ground in June, and only one strong shoot allowed to grow. In the month of September, take up the plants *carefully*, with as much earth adhering to the roots as possible, and pot them, filling up the space with good rich soil, composed of loam, leaf mould, and heath soil, in equal parts. Keep the plants in a warm room, where the temperature is not less than 60°, and they will flower well.

Amaryllises should be potted as soon as the buds make their appearance, in very rich loamy soil, with a small portion of sand, kept in a warm green-house, and liberally watered, from the time the foliage makes its appearance until it has perfected its growth; then turn the pots upon their sides, and let them remain until the bulbs show buds again.

Daphnes should be potted as soon as the new wood begins to grow, in rich loam and heath soil, (equal parts,) and be well watered till they have completed their growth, keeping them in a temperature of from 55° to 60°.

Acacias are very easy of cultivation. The plants should be potted in rich loam and leaf mould, and when in a growing state, liberally watered: to insure a good bloom, the plants should make a vigorous growth.

To go into the cultivation of the *carnation pink*, would occupy more room than we have to spare under this head. We must refer our correspondent to our Vol. II., p. 329, for information.

Cactuses are simply managed. The same treatment should be applied to nearly all the species and varieties. *C. Jenkinsonia* will flower abundantly with nearly the same management as the *Epi-*

phyllum speciosa, but as it is a more vigorous grower, it should be more sparingly watered in winter. Speciosissimus flowers with us abundantly every season; we give it plenty of water, as we do all the cactuses, from April to August, and keep it cool and dry from August to April, pinching off the tips of the most thrifty stems, to make them form stronger buds.

Echinocactus Eyriessii is exceedingly beautiful: it has a spherical head, six or eight inches in diameter, from the ribs of which spring the flowers, which are nine inches long, pure white, highly fragrant, opening at night, and, in our opinion, it is one of the finest of the tribe. It flowers two or three times a year, and is treated like the cereuses.

Cereus triangularis is white, with a larger flower than C. grandiflora.

The work of the Abbe Berlése, on the Camellia, is published semi-monthly, with two plates each, price about sixty cents each part, delivered in Boston. The text is printed in French. Sixteen numbers are now issued, containing thirty-two plates. It may be had by applying to us.

Mrs. Loudon, (not the Misses Loudon,) is publishing a work on bulbous rooted plants, with plates, quarto size, four plates in each number; price about seventy-five cents per number. It is a beautiful work, and well worth possessing by every lover of bulbs, particularly those from the Cape of Good Hope. It is now published as far as the sixth number, and will be completed in twelve or fourteen numbers.

We believe we have answered the queries of Mrs. H. M. B., and at somewhat greater length than is our custom; we shall, however, always be willing to oblige our readers in this respect, when we have the leisure to do so. For any more than what we have now noted down, we must refer all who wish for information on the above plants, to the articles in our previous volumes.—Ed.]

Hot water apparatus for heating green-houses, &c. (Vol. VI., p. 70.—I was much pleased with the description of an apparatus for heating plant-houses with hot water, by your correspondent, H., of Columbus, Ohio, in the February number of the Magazine. The plan appears more economical and simple than any heretofore noticed. A more minute description of the apparatus, no doubt, would be acceptable to many of your readers, besides myself. Could you not induce your correspondent to communicate the information desired? whether his boiler is cast iron or copper, and what metal the pipes? Whether it is necessary to have the boiler and reservoir, one or both, air tight? the probable quantity of fuel, say coal, it will require in a season, to keep it in operation, provided the green-house is detached from the mansion, and the whole of the heat applied to heating the plant structure? and, above all, the cost of such an apparatus, including boiler, reservoir, and pipes? I intend, next season, to erect some kind of an additional heating apparatus, and, for that reason, would be thankful for any information on the subject.—J. B. Garber, Columbia, Pa., Jan. 25, 1841.

[Our correspondent, H., will, no doubt, comply with the wishes of Mr. Garber, should this meet his eye.—Ed.]

ART. V. *Massachusetts Horticultural Society.*

Saturday, Jan. 2d, 1841.—An adjourned meeting was held this day—the President in the chair. Some discussion took place relative to the duties of the Treasurer, and the whole subject was laid upon the table for action at the adjourned meeting.

A Committee of three was appointed to revise the Constitution and By-laws of the Society.

Mr. J. E. Teschemacher was elected corresponding member of the Society.

No other business being before the meeting, it adjourned for two weeks, to January 16th.

January 16th.—An adjourned meeting was held to-day—the President in the chair. The unfinished business relative to the duties of the Treasurer was called up, and motion was made to strike out certain resolves passed two or more years since, which was carried.

Messrs. Baumann & Brothers, Nurserymen, of Bolwiller, on the Haut Rhine, were elected corresponding members of the Society.—Adjourned two weeks, to January 30th.

Exhibited.—Fruits:—From R. Manning, Catillac, Medale's St. Germaine, (Belle de Jersey, or Pound of American *Catalogues*,) and Bon Chrétien Turc, or Flemish Bon Chrétien, (Lon. Hort. Soc. *Catalogue*,) pears: also, Pumwater Sweet, Bellflower, Sweet Baldwin, Reinette, Noir Sanguine, Cat-head Greening, and a variety of apple unknown. The origin of the Pumwater Sweet and the Red Sweet Baldwin are unknown to the committee.

From B. V. French, Ortleyp Pippin, Black, (Coxe No. 67,) yellow Bellflower, Winter Nonsuch, Wellington, one variety unknown, and the Reinette du Canada apples: the latter were of large size and fine flavor. Mr. Thompson, of the London Horticultural Society, has pronounced it as the best apple of its size for a dessert fruit.

From the President, fine Easter beurré pears. From E. Phinney, large red apples, name unknown. From J. De Wolf, Brighton, very fine Easter beurré pears: these, as well as those shown by the President, were the produce of standard trees, and were as fair as any ever exhibited at the Society's room.

Vegetables:—From S. C. Mann, Dedham, large and fine specimens of Giant celery. The roots were in a fine state of preservation.

Jan. 30.—Adjourned from the 16th—the President in the chair.

The committee to whom was referred the subject of substituting medals in the place of money, for premiums, made their report, which was read to the Society. It was very favorably received, but further information was wanted, and it was laid upon the table, to be called up at the adjourned meeting, when the committee will give the information called for.

A committee of three was chosen to make a report of the doings of the Society for the past year, to include a statement of the funds of the Society, the amount paid away in premiums, the amount to be

awarded for 1841, the names of the members, &c. Messrs. S. Walker, C. M. Hovey, and Joseph Breck were appointed the committee. The meeting adjourned for two weeks, to February 13.

ART. VI. Faneuil Hall Market.

		From	To			From	To
<i>Roots, Tubers, &c.</i>		\$ cts.	\$ cts.	<i>Pot and Sweet Herbs.</i>		\$ cts.	\$ cts.
Potatoes:				Parsley, per half peck, ...		50	75
Chenangoes, } per barrel, . . .	1 12½	1 25		Sage, per pound, ...		17	20
Common, } per bushel, . . .	50	—		Marjorum, per bunch, ...		6	12½
Eastports, } per barrel, . . .	1 00	—		Savory, per bunch, ...		6	12½
English, } per bushel, . . .	1 75	2 00		Spearmint, per bunch, ...		6	—
Sweet, per bushel, ...	1 00	—					
Turnips:				<i>Squashes and Pumpkins.</i>			
Common, per bushel, . . .	25	37½		Squashes, per pound:			
Ruta Baga, per bushel, . . .	25	37½		Autumnal Marrow, ...		4	5
French, per bushel, ...	25	37½		Winter crookneck, ...		2½	3
Onions:				Canada crookneck, ...		3	4
White, per bunch, ...	3	4		Pumpkins, each, ...		8	12½
Red, per bunch, ...	3	4					
Yellow, per bushel, ...	62½	75		<i>Fruits.</i>			
White, per bushel, ...	75	1 00		Apples, dessert:			
Beets, per bushel, ...	50	62½		Common, per bushel, ...		50	62½
Carrots, per bushel, ...	50	—		Extra, per bushel, ...		75	1 00
Parasips, per bushel, ...	75	—		Baldwins, per barrel, ...		1 75	2 00
Radishes, per bunch, ...	—	—		Russets, per barrel, ...		1 75	2 00
Shallots, per pound, ...	20	—		Greenings, per barrel, ...		1 75	2 00
Garlic, per pound, ...	12½	—		Pearmains, per barrel, ...		2 00	—
Horseradish, per pound . . .	10	12½		Sweet, per barrel, ...		2 00	—
				Dried apples, per pound, . .		3½	4½
<i>Cabbages, Salads, &c.</i>				Pears, per half peck:			
Cabbages, per dozen:				Chaumontelle, ...		50	—
Savoy, ...	37½	50		St. Germain, per doz. . . .		50	1 00
Drumhead, ...	50	75		St. Michael Archangel, } per dozen, ... }		—	—
Red Dutch, ...	75	—		Baking, per bushel, ...		2 00	2 50
Brocoli, each, ...	—	—		Grapes, per pound:			
Cauliflowers, each, ...	12½	25		Makga, ...		20	25
Colery, per root:				Pine-apples, each, ...		—	—
Common, ...	8	12½		Cranberries, per bushel, . . .		1 50	1 75
Giant red and white, ...	12½	20		Lemons, per dozen, ...		20	25
Spinach, per half peck, ...	12½	—		Oranges, per dozen:			
Dandelions, per half peck, . .	87½	—		Sicily, ...		20	25
Lettuce, per head, ...	12½	—		Havana, (sweet), ...		50	75
Tomatoes, per half peck, . . .	—	—		Chestnuts, per bushel, ...		2 25	2 50
Cucumbers, (pickled) pr gal.	25	—		Walnuts, per bushel, ...		2 00	2 50
Peppers, (pickled) per gallon	37½	—		Castana, ...		—	—
				Almonds, (sweet), per pound,		—	—

REMARKS.—A more open winter, thus far, has scarcely ever been known. The month of January, up to the time we now write, has been exceedingly mild, with several heavy rains. The snow which fell in December, was carried off very suddenly by the severe storm of the early part of this month, and the ground was so completely protected up to that period, that vegetation looked as fresh as if it had been covered up only a few days. The subsequent weather has been so unusually favorable, that the market has been supplied with some articles a month or six weeks earlier than usual.

The market has been unusually dull: there is an abundant stock of every thing on hand: the tendency of almost every thing is downwards. Potatoes remain the same as at the time of the last report: there have not been any arrivals, except of a few Lancashire potatoes, which we received by a late packet, being a lot which we purchased when in England, last autumn; we saw them when growing in Lancashire, and engaged a number of barrels. They came out in good condition, and have nearly all been taken at our quotations: the stock of sweet potatoes holds on, and in good condition: it is surprising to see the difference in the capability of the stock to keep well, in different seasons; it is undoubtedly owing to the more perfect growth and ripening of the potatoes. Onions are heavy, and prices have fallen off a shade; there is an abundant supply. Radishes have not yet made their appearance, but in the course of a week, a few bunches will be brought in; they are now nearly grown.

There is no alteration in cabbages; the stock keeps well, and there is a good supply. Brocolis are all gone. A few cauliflowers yet come to hand, but the stock is nearly exhausted: the quantity brought in and sold has been larger than usual. Celery of superior quality is scarce: as the season grows late, the roots are reduced in size, from the rotting of the outer stalks, and it is difficult to keep it without being more or less destroyed in this manner. Lettuce is scarce, but a few heads have made their appearance. Spinach has been abundant and cheap; the tops made an excellent growth in the autumn, and when the snow disappeared in the early part of the month, it had kept so well that an abundance of it has been cut up to the present moment. The same may be said of dandelions, which have been brought in at this unusual season. Squashes of good quality are nearly gone: they are the only article which can be said to have in reality advanced in price; if cultivators could only manage to keep their stock, particularly of autumnal marrows, they would realize good prices for them at this season of the year.

The stock of fruit remains ample; there is no change in prices: pearmaines are about gone, and New York pippins are entirely gone: Baldwins and russetts constitute the greater part of the stock. Pears are all gone, except St. Germaines and baking: a few of the former, of handsome appearance, cultivated in Boston, command our quotations. Cranberries remain the same: shipments are nearly over, except in small lots. Sicily lemons and oranges are abundant. Chestnuts are nearly gone. Walnuts are more in demand, and are held at higher prices. Arrivals of foreign nuts have afforded a good supply.—*M. T., Boston, Jan. 29th, 1841.*

HORTICULTURAL MEMORANDA

FOR FEBRUARY.

FRUIT DEPARTMENT.

Grape Vines.—As the spring approaches, signs of returning vegetation will be apparent in vines in the green-house. Towards the latter part of the month, if it has been kept at a moderate warmth, the eyes will begin to swell, and will break early in March. As soon as this is perceived, whether sooner or later, let the shoots be put in readiness to commence their growth. In graperies fires may now be lighted, if it is desirable to have an early crop. In hot-houses and pine stoves the vines are now in flower, and they should be carefully attended, supplied with proper heat, and a due quantity of air and water.

Peach trees, and vines, in pots, may be brought into the green-house if there is room, or may be taken into graperies after the fires have been lighted a few days.

FLOWER DEPARTMENT.

Camellias will begin to make their new wood, towards the middle of the month: all those plants which need it should immediately be repotted. They should now be occasionally syringed, and watered freely at the roots. Inarching may be performed as soon as the plants begin to grow. Cuttings may now be put in with success.

Ericas may now be propagated by cuttings.

Verbenas should now be encouraged in their growth, by liberal supplies of water.

Geraniums, if in small pots, should now be shifted into the next size. Cuttings may be also put in with success, if it is desired to propagate a rare kind.

Onalis Bowiei will now be done flowering and growing, and should only be occasionally watered.

Cyclamens will begin to flower now, and should receive liberal waterings.

Cactuses.—As the season advances, give more frequent supplies of water.

Roses will now be pushing into flower. Keep them clear of the green fly, water liberally, occasionally with liquid manure if convenient.

Calceolarias should be repotted at this season.

Dahlias should be potted, if wanted to bloom early. The roots may be separated, or, if desirable to increase a choice variety, they may be propagated by cuttings. The seeds should now be sown, and the plants will flower well the first year.

Passifloras should now be pruned and shortened in the same manner of a grape vine, as the old wood does not produce strong flowers.

Annual seeds of tender and choice sorts may now be sown, in hot-beds, or the green-house.

Pansy seed sown now in pots, and the young plants placed in the border, in April, will flower finely.

Plants in frames should be aired in good weather.

THE MAGAZINE

OF

HORTICULTURE.

MARCH, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *Some Notice of the Vegetable Productions of the Valley of Columbia River, and China.* By Gen. H. A. S. DEARBORN.

WHILE reading the Rev. Mr. Parker's account of his journey to the mouth of the Columbia river, and Mr. Irving's *Astoria*, soon after they were published, I made extracts of such portions of those interesting works, as related to the vegetable productions of the Oregon Territory, which, I thought, might be desirable to obtain, either for their valuable qualities, or to increase the number of our ornamental trees and shrubs; and having recently examined the accounts of the embassies of Lords Macartney and Amherst to China, in 1792 and 1816, I have added succinct descriptions of a number of the most remarkable trees and plants which are cultivated in that empire, and it is believed might be advantageously introduced into this country.

As the most direct and certain mode of accomplishing the objects that have been named, the notes which have been made are subjoined, for publication in the Horticultural Magazine.

Either the plants or seeds can be obtained, if the gentlemen who have commercial intercourse with China, and the officers of the Missionary Society, who are in correspondence with their establishments on the Columbia river, would aid in the attempt.

VEGETABLE PRODUCTIONS OF THE VALLEY OF COLUMBIA RIVER.

FRUITS.

Salal berry.—A sweet and pleasant fruit, of a dark purple color, and about the size of a grape.

Service berry.—The fruit is of the size of the thorn apple; is black when fully ripe, and pleasantly sweet, like the whortleberry.

Pambina.—A species of bush cranberry.

Raspberries.—Besides the common kinds, there is a species three times the size, and of a very delicate and rich yellow color.

Sweet Elder.—A variety of that shrub, peculiar to the Oregon region.

Strawberries.—Mr. Parker considered the strawberries of the Columbia of a more delicious flavor than any he had ever tasted.

Gooseberries.—There are four kinds:—

Common Purple.—Bush low, and very thorny.

White.—Fruit small, smooth, and very sweet.

Yellow.—An excellent kind, and flavor pleasant; it grows on a shrub free from thorns.

Deep Purple.—Of the taste and size of our winter grape, with a thorny stalk; fine flavor.

Currants.—Three kinds:—

Purple.—Very large, and well tasted; grows on a bush eight or nine feet high. This is probably the *Ribes odoratissimum*, which was introduced into our gardens from seeds brought by Capt. Lewis, on his return from the expedition to the mouth of the Columbia river, during the administration of Jefferson.

Yellow.—Of the size and taste of the common large red currant; the bush four or five feet high.

Scarlet—is very beautiful, resembling the strawberry in sweetness; it grows on a low shrub.

NUTRITIVE ROOTS.

Taro.—A bulbous rooted plant, of the genus *Arum*, and is planted in hills, on ground so situated as to be partially flooded with water, in the manner rice is cultivated. It is fit for

use in eight or ten months from the time of planting. To prepare them for food, it is necessary that they should be roasted, when they are a substitute for bread; or they are made into *poi*, by pulverizing them into a paste.

Wappatoo—is a bulbous root, the common *sagittifolia*, or arrowhead, and is found only in the valley of the Columbia river, below the Cascades. It becomes soft by roasting, and is a palatable and nourishing food. It is much used by the Indians, and is an article of trade. It grows in shallow lakes and marshes which are covered with water. The Indians search for it with their feet, and extricating the roots from the mud with their toes, they rise to the surface of the water.

Cammas—is a truncated root, and is of great importance to the Indians. It grows in moist rich land, in the form of an onion. It is roasted, pounded, and made into loaves, like bread, and has a liquorice taste.

Cowish, or Biscuit root, grows in dry land, and is generally of the size of a walnut, but often larger. It tastes like the sweet potato, and is prepared for food in the same manner as the *cammas*, and is a tolerable substitute for bread.

Bitter Root, or *Racine amere*, grows in dry land, and is fusiform, like a carrot. Although not very pleasant to the taste, it is considered by the Indians and hunters as very conducive to health.

Onion.—Two kinds, one of which is characterized for its beautiful red flower, and often grows on volcanic scorice, where no other vegetable is seen.

HERBACEOUS PLANTS.

Red Clover.—A species different from that cultivated in our fields, but not less fragrant and beautiful.

Broom Corn is found on the bottom lands, but it is not stated whether it is a different species from that which we cultivate.

Wild Grain, resembling barley or rye.

Wild Flax.—It resembles, in all respects, that which we cultivate, except that it is a perennial plant. The Indians use it for making fishing nets. It is cut like grass, for the roots are large, and descend deep into the earth.

A flowering Vine.—Among the plants near the mouth of the Columbia river, Washington Irving describes a flowering vine, in his *Astoria*, which he considered deserving of par-

ticular notice. Each flower is composed of six petals, about three inches long, of a beautiful crimson color, the inside spotted with white. The leaves of a rich green, oval, and disposed in threes. This plant climbs upon trees, by attaching itself to them; when it has reached the topmost branches, it descends perpendicularly, and as it continues to grow, extends from tree to tree, until its vinous stalks interlace the grove, like the rigging of a ship. The stems of this vine are tougher and more flexible than willows, and are from three hundred to six hundred feet in length. From the fibres, the Indians manufacture baskets, of so close a texture as to hold water. Parker calls it the Vining Honeysuckle, and observes that it is one of the first ornaments of nature.

FOREST TREES AND SHRUBS.

The forest trees, near the coast, are hemlock, spruce, white and red cedar, cotton wood or balm of Gilead, white oak of several kinds, white and swamp ash, willow, black walnut, and firs.

Firs.—There are three species, and constitute by far the greatest portion of the forest trees of the Oregon region.

Red Fir.—The foliage is scattered on all sides of the branches, in the same form as those found in the eastern states.

Yellow Fir.—The foliage has leaves only on the upper side.

White Fir, has leaves oppositely pinnated.

One species of the fir grows to the enormous size of from four to eight feet in diameter, and two hundred feet high. Mr. Parker measured one which was eight feet in diameter, and two hundred and fifty feet high.

Pine.—The pine is not found in the low country, nor far west of the main range of the Rocky Mountains. They are the white, Norway, pitch, and elastic.

Elastic Pine.—The leaves resemble those of the pitch pine, growing in bunches at the ends of the limbs, but shorter, and smaller. The bark and trunk of the tree resembles the larch. The wood is firm and elastic. The trees grow very tall and straight, and without limbs, except near the top. It is very difficult to break a limb an inch in diameter. They are admirable for masts and spars, from their strength and elasticity.

Oak.—On the plains, below Fort Vancouver, is a species of white oak, which attains the size of eight feet in diameter, They retain their size to the height of about thirty feet, and then branch out very far.

Laurel Bay.—There is a tree in the lower part of the Columbia valley, which grows much in the form of a laurel, or bay tree, but attains a much larger size. The bark is smooth, and of a reddish color. This may be a species of magnolia. It is called by the hunters the strawberry tree.

Thorn Bush.—There are several varieties of the thorn, many of which are large and fruitful; those bearing a red berry present a very beautiful appearance. There is one kind whose fruit is black, and of a pleasant sweet flavor. The genus *Crataegus*, or hawthorn, contains numerous varieties, and it is stated, in the last Magazine of Horticulture, that between thirty and forty species have already been collected in the United States, and sent to England, and are so much esteemed that they are selling rapidly. It is believed many more kinds exist.

VEGETABLE PRODUCTIONS OF CHINA.

Tallow Tree,—or Lat-choo, according to Anderson, who states that large plantations are cultivated, throughout China, for the tallow, or vegetable wax, which their fruit yields. He represents it as remarkable for its beautiful appearance; having brilliant leaves, and pale blue blossoms.

The profusion of candles used by the Chinese, which are all made of the vegetable tallow, is evincive of the cheapness of that material, for lanterns are used by all classes of people. They decorate the entrance of their houses with them, they are hung up throughout all the encampments of the troops, and every boat and vessel on the numerous canals and rivers is obliged to have one or more lanterns suspended during the night, and illuminations of the streets are common. So profusely are lanterns used which afford every variety of colored light, that the canals and rivers, villages and cities, presented the appearance of a general illumination, as the embassies passed from Pekin to Canton, a distance of fifteen hundred miles.

Mr. Ellis says the Chinese name of the tallow is Pee-yakwotza, or skin oil fruit; but he designates it as the *Sillgia sebifera*. He says it is a large tree, and when full grown,

looks, at a distance, like a maple, and is, in autumn, very beautiful, from the contrast of the brilliant tints of the leaves with the berries in their different stages,—some with their outward husk green, some brown, and others freed from the covering, and of a pure white.

The berries are of the size of a pea. The tallow is obtained by compression in a mill, and is sold in large cakes.

Pe-la-shoo, or wax bush, (*Ligustrum lucidum*,) are a species of prim or privet: our wax or tallow shrub, the *bayberry*, is of the genus *Myrica*, and is therefore a very different plant. The wax found on the *Pe-la-shoo* is deposited by a species of insect peculiar to it. The shrub reaches the size of a large thorn bush.

Camphor tree—(*Laúrus Camphora*,) abounds on the borders of the Kan-Kiang-ho, a branch of the Yang-tse-kiang, or Son of the Sea, but called the Blue river on the maps of China. Mr. Ellis observes “that orange groves were seen in the morning, but my eyes have been more gratified by contemplating the rich green foliage of the camphor tree, which, combined with the wide spread of its branches, renders it equal in beauty to any of the trees of English scenery, and as it is also an evergreen, it is a valuable ornamental tree, in climates where it will flourish.” It grows in China as far north as lat. 33 or 34.

Oil tree.—A tree with a large leaf, resembling that of the sycamore, was pointed out to the gentlemen of Lord Amherst's suite, from which an oil is expressed, used to preserve the timbers of the boats, junks, and other vessels, and is considered next in efficiency to the varnish tree.

Tsi-shoo.—*Rhus vernix*, or Varnish tree. This tree is cultivated in plantations, and is of the height of a peach tree. The leaves are shaped like the laurel, and are of a light green, with a downy feel. The varnish is extracted by slitting the bark, but it is necessary to guard the hands, as the leaves, when bruised, produce sores on the skin.

The varnish obtained from this tree is the celebrated material which renders the lacquered articles of Japan and China so beautiful and desirable.

Besides the above named plants, there are several subjects connected with the useful and ornamental arts, which merit attention, in China; and it is to be regretted, that after the intercourse which has so long existed with that nation, efforts

have not been made to introduce many of their discoveries in various branches of industry.

Masonry.—Mr. Anderson represents the works of masonry as very superior to any to be found in Europe. The best bricks are as smooth, and have a polish like marble. They are sixteen inches long, eight wide, and two and a half thick, and are laid with so much care that the seams of mortar are as small as a thread, and so accurately are the bricks placed in each row, that the lines between them look as if drawn by a painter's pencil. The bricks are of a dark ash or bluish color, and in many places they are black, from the character of the clay of which they are made.

House Painting.—This is done in a very superior manner, so that the paint appears with a gloss equal to that of Japan ware, and it not only preserves its color from fading, but never suffers from exposure to the air, sun, or rain. This effect is produced by some ingredients mixed with the paint, and not by an after varnish.

The art of making such paints, or their importation into this country, would be an immense acquisition, for there is no skill in painting, in Europe or this country, either for the internal or external walls of houses or other edifices. Our paints do not last a month without changing, and in two or three years are absolutely effaced, when exposed to the open air. The Egyptians and Greeks understood this art far better than the moderns, for the paintings on the temples of the former, and their tombs, after a lapse of two or three thousand years, appear as fresh as if the work had been done within a week; and even on the external architectural stone ornaments of many of the most magnificent Grecian edifices, the paint is yet perfect. There is not, in fact, a single art, which is of such universal importance, where so little progress has been made; and notwithstanding the discoveries of chemistry, and the brilliant pigments which are thus produced, still the mode of applying them so as to render them durable, is yet to be found out. It is a subject well worthy of research and extensive experiment; and it is probable, if all the best kinds of paints were imported from China, the mode in which they are prepared, as well as the ingredients, might be ascertained, and possibly the latter could be found in our own country; but if such should not be the case, it may be better to depend on that nation for paints, than to use those which are not worth being applied, from their rapidly fading character, and want of

durability, for ornament, or the preservation of the wood to which they are applied.

Excellent apples and pears were presented to the gentlemen of Lord Macartney's embassy, in the northern provinces, as they passed down the canal from Pekin to Canton; and as the pear, from the number of kinds, and the length of time they are to be enjoyed, is the most valuable fruit of the largest portion of the United States, should not efforts be made to procure the Chinese varieties, as it is probable some of them may be of a very superior character?

The *Camellia japonica* is extensively cultivated in the southern provinces of China, for the oil which is obtained from its large seeds. Vast plantations were frequently seen on the hill sides and borders of the rivers and canals.

Very respectfully, your obedient servant,

H. A. S. DEARBORN.

Hawthorn Cottage, Feb. 1, 1841.

We are highly gratified in being able to lay before our readers so interesting a communication as the above, from so able a pen as that of Gen. Dearborn. No individual has done more to create a taste for horticulture, in this country, than Gen. Dearborn; and it is in a great degree owing to his exertions, as the first President of the Massachusetts Horticultural Society, that gardening has made such rapid advancement in the vicinity of Boston.

The flowers, fruits, &c., enumerated by Gen. Dearborn, as natives of the Columbia river, might be soon introduced if exertions were made to do so. The missionaries could easily send home, and would probably willingly do so, if they were requested to by any of their friends, either the seeds or plants of the kinds which have been named: and if they could not be introduced in this way, they could undoubtedly be obtained by the United States' Exploring Expedition. Letters from the officers attached to the Expedition, have been received, dated at the Sandwich Islands, where they have recently arrived from a cruise to the Feejee Islands, stating that they would proceed to the Columbia river, where a year or more would be spent, in surveying the coast of the Oregon Territory, before they returned home. Should this be the case, it will afford a most favorable opportunity to procure all the valuable plants, flowers, and fruits, which grow in that mild

climate. Seeds have been received at Philadelphia, from the Exploring Expedition, while at Sydney, New South Wales, from which plants have been raised and are now coming into flower. We may therefore anticipate, that should the Expedition visit the Columbia river, as is now expected, the botanists connected with it will secure seeds or plants, that our gardens may be enriched with the valuable fruits, &c., which have been above described.

ART. II. *On the use of Caoutchouc, or India Rubber, for the purpose of tying in buds, grafting, &c.* By H.

SIR,—Will you permit me to suggest to you the use of caoutchouc, in thin slips, for tying in the buds of delicate shrubs, roses, &c., in inoculating? I think that the principal causes of failure in this operation, when performed in June and July, are, first, the drying of the shield and bud by the sun and air, before the adhesion is formed; and, second, although not so frequently, from water getting in, and reducing the surfaces to a sodden state. Either of these effects the use of the above mentioned ligature is calculated to prevent. If wound carefully, the edge of each turn lapping the preceding one, it will be water and air tight, and by its elasticity will yield to the growth of the tree.

India rubber can be procured in a proper form from the manufactories, and where one is at a distance from these, it can easily be prepared, by soaking one of the small India rubber bottles in sulphuric ether, for twenty-four hours, blowing it up with a quill, tying the neck tight, and suspending it in a wash-room until dry. The expense can be no object, if it proves as much better than other ligatures, as I think it will be found to. It cannot cost more than a quarter of a cent per bud. I shall try it this season, and send you the result, and I hope some of your correspondents will do the same.

H.

Hartford, Conn., Jan. 1841.

ART. III. *An account of the Method of planting and managing Peach Orchards, as practised in New Jersey.* By T. HANCOCK, Nurseryman, Burlington, N. J.

THE peach tree is very extensively cultivated throughout New Jersey, and large quantities of the fruit are annually sent to the New York and Philadelphia markets. Since the opening of the communication by rail-road between these two cities, through the interior of the State, it has been the means of greatly increasing the number of peach orchards, and many large and extensive plantations have been made. Within a few years, from the increased facilities of rapid and safe transportation by rail-road, between Boston, Providence, and Stonington, the eastern cities have been supplied, to a very great extent, with New Jersey peaches, and the opening of such a market has induced cultivators to plant more extensively, in order to supply the demand. The crop proves a very profitable one for the light soils of a portion of the State, as the trees flourish very well where the land is not sufficiently good to produce but a very few bushels of corn to the acre.

If the few following remarks, in relation to our mode of cultivating the peach, will interest your readers, you can give them a place in your pages. I have an orchard of some extent, and have, in some seasons, gathered a very large crop.

When it is intended to plant out a good orchard of trees, we generally select an elevated position, entirely unprotected by any timber or shelter of any kind: if a situation can be selected near the bank of a river, the crop is more certain, as the trees better withstand the frosts, which occasionally do much damage.

Plough, and put the land in good condition for corn or vegetables, and plant the trees twenty feet apart each way. Continue to till the land, taking off a crop of peas, beans, potatoes, or something that does not grow too high: wheat, rye, and oats are very injurious, and should not be planted. The land must not remain without tillage, as the trees would soon be injured; indeed, nothing will kill a fine peach orchard sooner than to let it lie in sward.

The trees should be two years old on the stock, (from seed,) and one year from the bud, (the year after budding.) This is considered as the best age for transplanting. If the

water stands near the surface of the soil, or if the land has springs near the top of the ground, I should not deem it advisable to plant with the expectation of very certain crops. I have lost two orchards planted in this manner, while, in an adjoining field, where the land, or a part of it, was high, with a dry subsoil, the trees flourished, and produced abundant crops.

Light sandy soil, or light loam, we consider the most preferable for planting out peach orchards, and I should judge, that on many of the elevated knolls, in the vicinity of Boston, the peach might be cultivated to good advantage, particularly the earlier varieties. It is at least well worthy of trial.

Yours, respectfully,

T. HANCOCK.

Burlington, N. J., Jan. 1841.

We have already noticed Mr. Hancock's nursery, and given some account of his peach orchard, (Vol. V., p. 365.) In the season of 1839, when we passed through Burlington, the peach trees were breaking down with the heavy crops. Mr. Hancock's trees were literally loaded; and so fast did they ripen, that the ground under nearly every tree that we noticed, was covered with the fruit. The orchard contained about seventeen acres, and was covered with healthy trees, and the crop was estimated at two thousand baskets (about fifteen hundred bushels,) which commanded one dollar and upwards a basket, in the New York market. The land was a light sandy loam, and would not produce, as Mr. Hancock informed us, five bushels of corn to the acre, unless very heavily manured. The ground was not planted at all when we saw it, but it had been tilled with the cultivator, to keep the surface free from the growth of weeds, &c. The trees do not make a vigorous growth, and consequently do not need but little pruning.

The great error in cultivating peach trees, in New England, has been in planting them in too rich soil, and encouraging them to make a rapid and vigorous growth: the trees, in consequence, are overtaken by the cold weather, and the severe frosts, of the early part of winter, before the wood is fully ripe, destroy the young fruit buds, oftentimes the young and tender shoots, and occasionally the trees are killed completely down to the roots. The very opposite course should be pursued: the trees should be set out on a light soil, and

not encouraged to make a vigorous growth; the young wood will then get fully ripe, and hardened before cold weather; the frost will have less effect upon the buds, and, unless the situation is very unfavorable, and subject to late frosts in the spring, the chances are that the trees will not be injured, and will produce good crops.

The cultivation of the peach has attracted more attention, within a year or two, in the vicinity of Boston, than for some time previous: to those who are planting trees, we would recommend a perusal of Mr. Hancock's communication, convinced, from the success which has attended his cultivation of the trees, that the information which he has given will be found the result of experience upon the subject.—*Ed.*

ART. IV. *Notices of Culinary Vegetables, new, or recently introduced, worthy of general cultivation in Private Gardens, or for the Market.* By the EDITOR.

IT is now two years since our last notices of new vegetables appeared in our pages. Owing to various circumstances, it was not convenient for us to complete our report so early last year as usual, and we concluded to let the whole remain until the present year, when all the information which we had collected could be presented together.

During the two years past, not many new kinds of vegetables have been brought to notice. A few have appeared, which are said to be well worthy of cultivation, but their excellence remains to be tested by actual experience. So many of the varieties of reputed worth, have proved of no value, when fairly tried, in comparison with the old and established sorts, that cultivators are fearful of introducing them until they are well satisfied that they are really valuable additions. The accession, therefore, of new varieties, even when they are great improvements over the old kinds, is necessarily very slow, and only effected by continually bringing them before the public, and showing by actual experiment, that they possess

superior qualities. This has been the case with several new and excellent vegetables, which, a few years since, were not found in cultivation; and, though we recommended them year after year, yet they are but just beginning to be generally known and appreciated. We could name some of the kinds, but a reference to our notices, in our past volumes, will show at once that our remarks are correct.

In our two last volumes, (V. and VI.,) several very excellent papers have appeared upon the growth of vegetables, more particularly on the cultivation of the cauliflower, Brussels sprouts, celery, &c. These will be followed by others, in the present and future volumes, upon the growth of all the principal products of the kitchen garden, and will afford the amateur an opportunity to obtain all the information which he need possess, to successfully cultivate his garden.

Several of the varieties of vegetables which we have heretofore noticed, merely giving their names, without having been able to offer any thing relative to their growth or quality, only from what we have seen stated, will be mentioned again, and any information which may have been subsequently obtained, in reference to their excellence, will be also given. Some entirely new kinds, not yet introduced, which we see are attracting notice abroad, will be named, that amateurs and others particularly desirous of trying new things, may have the chance to learn what is worthy of their care and attention.

CELERY.—Since our notices of the new giant celeries, in our previous volumes, (III., p. 56, and IV., p. 51,) they have been much sought after, and are now so extensively cultivated, that they are supplied by market gardeners in considerable quantities, and at all times command a much higher price than the old sorts. The roots are so much larger, the quality so superior, and the appearance so much handsomer, that in a few years we do not doubt but they will be almost exclusively grown. There is certainly no excuse for cultivating an inferior sort; yet there are some individuals who are so prejudiced against every new article of recent introduction, that it is a long time before such prejudices can be overcome. In the volume referred to, (IV., p. 51,) we mentioned a circumstance of the kind, where the cultivator refused to try the giant celeries; but at the present moment, the same individual, who was so fearful of merely making a trial of a few roots, could not be induced to go back to the cultivation of the old kinds.

Bailey's red and white Giant, and Law's silver Giant, are the kinds which we have noticed, and which have been introduced and cultivated. There is now a new variety, which is said to be superior to either of these. It has not yet been grown in this country, but we shall try it the coming season, if the seed can be procured. It is called

Seymour's Superb White Celery.—We have already noticed it in our last volume, (VI., p. 308.) It is said to have been first raised in 1830, by Mr. Seymour, whose name is familiar, as the originator of the celebrated Seymour system of training the peach. It is so shy a variety in producing seeds, that its cultivation has been confined to a few individuals and acquaintances of Mr. Seymour, and it did not find its way into the trade until 1839, after the long period of nine years.

This variety is said to grow to a great size, some of the roots or heads having weighed as much as thirteen pounds, even after the soil and loose leaves were trimmed off, and attained to the height of five feet. Mr. Seymour, the younger, has cultivated it in such a manner that the roots of a whole row, seventy-five feet long, averaged the weight of ten pounds each. Four and five pounds is the weight of the roots, under ordinary treatment.

Our readers may judge by this, of the value of this new variety; and we would recommend it to them for trial along with the present large sorts, under precisely the same treatment, that its merits, as compared with the latter, may be fairly tested.

THE WHITE CARROT.—A new variety of the carrot has been recently introduced: we alluded to it in our IV., p. 86, at which time it was advertised by the London seedsmen. We procured some of the seeds in 1838, but we did not give it a trial until the past year. We sowed a few seeds very late, and in light sandy soil, but they grew well, and attained a good size in September: at that time we pulled a few roots, which were presented for exhibition at the Annual Exhibition of the Massachusetts Horticultural Society, where they attracted considerable attention. Their qualities as an eating carrot we did not try.

We believe the variety has not been recommended only as a variety for field cultivation. So far as their size and produce might be estimated, from the small quantity we cultivated, we should think them a very valuable variety: and from some statements we have seen in relation to it, in the agricul-

tural journals, we think it will prove an acquisition to our agriculture.

SQUASHES.—The autumnal marrow is now one of the most esteemed squashes, both for fall and winter use, and it commands a higher price in the market than any other, not even excepting the *true* Canada. The only fault is that, from the difficulty of obtaining the seed pure, many individuals have been greatly disappointed in their crop, and in the place of autumnal marrows, they have had almost every variety of squash except the true one. To keep them pure, no other sort should be grown near them, and perhaps it would be the safest way to have no other squash in a small garden, if these are preferred, excepting the summer varieties. Attention to this will prevent any disappointment.

Bergen's Striped Squash.—This is a variety of summer squash, the seed of which we received from New York, for the first time, last year. We planted several hills, but although the season was so dry that the vines nearly perished, yet what remained produced an abundant crop. The squash is small, generally scollop shaped, yellow, with numerous stripes of light and dark green. It promises to be a valuable variety, and we would recommend it for trial. We believe it originated in the vicinity of New York.

POTATOES.—Since the introduction of the Rohan potato, which has attracted so much attention, one or two other varieties have been brought into notice.

The Rohan has now been very extensively cultivated for two years, a sufficient time to form some opinion of its merits, but upon this point cultivators are greatly divided. Some, after a trial of two years, have pronounced it one of the most productive kinds ever raised; while others think they are not equal to the long reds and some other sorts. From forty to a hundred bushels have been raised from one bushel, and we believe a majority of those individuals who have given the Rohan any thing like a fair trial, will pronounce them to be the most productive of any potato ever raised in the country. Of their qualities as an eating potato there are various opinions: some good judges state that they fully equal the Chenango, and other commonly cultivated kinds; while others allege their total unfitness for the table. This great difference of opinion must undoubtedly arise from eating the potato when raised, in the first instance, under the most favorable circumstances, of good soil, proper manure, &c.—and in the other, when grown in a

poor soil, and an inferior crop. We have heard several gentlemen, on whose opinion we could place much confidence, state, that the Rohans were a very excellent potato, and would compare with any of our common varieties, and were only surpassed by the best Eastern sorts. We hope the trial of another season will more fully settle the opinion of cultivators respecting its true merits.

The Sommeiller potato is the name of a new variety which was received from France, for the first time, last year. It has only been tried by a few individuals. A correspondent of the *Cultivator* states that he planted one potato, which he received from France, late last spring. From the shrivelled and bruised condition in which it was received, he was not able to make but twenty-one sets, of one eye each, weighing about nine ounces, and when planted, many of them were so poor that only eleven grew. The twenty-one sets were planted in one row across the garden, one eye in each hill, the hills two feet apart in the row. In order to compare it with the Rohan, he cut from a potato of the latter, twenty-one eyes, which he planted in a parallel row, at a distance of three feet from the Sommeiller; of these every set grew, and with great vigor. The whole were gathered on the 11th of October last, when the tops were still green. The product of the eleven sets of the Sommeiller was forty-seven pounds of potatoes, and from the Rohan, one hundred and twenty-four pounds. This, when it is recollected that only eleven sets out of twenty-one grew, must be called a good product: the whole of the sets did not weigh nine ounces, and though ten of them did not start, and many of them that did made a feeble growth, yet the yield is as nearly two hundred to one. The largest potato weighed three pounds two ounces.

The Sommeiller potato is supposed to be a seedling from the Rohan, as it very much resembles it in general appearance; it is rather rounder, and the eyes not so deeply sunk. As an eating potato, the Sommeiller differs but little from the Rohan; it is a shade whiter, and perhaps a little more farinaceous. Another year will afford the opportunity of giving it a good trial.

The Pollard potato is the name of a new variety, raised in Maine, by Mr. Pollard, of Isle Wetmore, where it was produced from the seed of the Chenango. It is a good sized potato, longer and thinner than the Chenango, with a very smooth bright red skin, the eyes slightly raised upon the sur-

face, and few in number. It has been but recently introduced to notice, but it is a variety of great excellence, yielding a large crop, and is every way worthy of extensive cultivation.

Seedling Potato.—We have already noticed Mr. Hancock's new seedling potato, (V., p. 367, and VII., p. 73.) From what we can learn respecting it, of Mr. Hancock, it will probably prove a valuable variety. We would recommend it to the notice of cultivators, as we are convinced it will prove all Mr. Hancock has stated.

Our notices will be concluded in our next.

ART. V. *On the culture of the Tomato and Egg Plant.*

By J. W. RUSSELL, Superintendent at Mount Auburn.

The Tomato, (*Solanum lycopersicum*,)—is of the same family of plants as the potato, (*Solanum tuberosum*;) the French and Italians, particularly the latter, think as much of a field of tomatoes as a New England farmer does of a choice field of potatoes.

Tomatoes are so well known, that the fruit, when ripe, has become almost an indispensable dish through the summer months, on every table. The modes of cooking it are various, according to the taste and fancy of individuals, and it would, I conceive, be altogether unnecessary to describe them.

Any person who has a small plot of ground that is not shaded by buildings, or otherwise, from the sun, can with certainty raise a plenitude of tomatoes for family use, as the plants, whether placed in a rich soil or poor soil, with a bountiful supply of manure, will bear an abundance of fruit. One thing ever to be remembered is, to select the sunniest spot, as that is by far the most favorable for the ripening of the fruit.

The seed should be sown the first week in May, in a box, or large flower pot, that has been previously filled with fine fertile earth, and placed in a warm sheltered spot, and if there is any prospect of a cold night, the box or pot should be taken under cover, until the weather becomes fine again; then the open air is the most proper place for the plants.

By the first week in June, if the weather is fine and there is a prospect of its continuance, put out the plants in the ground designed for them, singly, three feet apart plant from plant. This may appear to be a great distance between each plant, to those persons who are not acquainted with the luxuriant growth they will make, if the ground has been well manured and thoroughly mixed with the soil. If the plants have not sufficient room allowed them, to grow and spread their branches, the mistake will be found out when it is too late to remedy the evil. A temporary trellis may be made at a trifling expense, to train the plants to, with a few laths, and some stout strips of board, for stakes, to be driven into the ground for uprights, to which the cross bars of laths are to be fastened. If this system be followed, and the plants occasionally tied to the trellis, the fruit will be clean and handsome at the time of gathering for use; but if left to lay upon the ground, the fruit would be often spattered over with dirt by heavy rains, watering, &c.

It will be necessary, at times, to thin out some of the weak branches, in order to give the fruit all the light, air, and genial rays of the sun that you possibly can; and by stopping the shoots when the fruit is thickly set, and watering the roots if there is a long continuance of dry weather, one can scarcely fail of obtaining a good crop of tomatoes.

The Egg Plant, (*Solanum Melongena*,)—is also allied to the potato. The seeds should be sown and the plants treated in the same manner as recommended for the tomato, until the final planting out, which should be the first week in June. The ground having had a good dressing with manure, and well dug over, put out the plants two and a half feet apart every way; keep the ground clear of weeds between the plants, by frequent hoeings, and an ample crop will fully repay for all the trouble.

There are three varieties of this plant, viz. two of the purple fruited, and the white. The purple is cultivated for culinary purposes, and, when sliced and fried in batter, it very much resembles in taste a very nice fried oyster.

These remarks are intended for the perusal of individuals who are novices in the art of gardening, and who have no facilities but the open air to work in. Where there are hot-beds or green-houses, the seeds may be planted earlier, and the plants forwarded so as to ripen their fruit much sooner.

J. W. RUSSELL.

Mount Auburn, Feb. 20, 1841.

ART. VI. *Floricultural and Botanical Notices of new Plants figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

Floricultural Intelligence.—*New seedling Camellias.*—The number of new seedling camellias, of American growth, is rapidly increasing. From various sources we hear of the flowering of seedling plants, and among them some of very promising character. In the course of a year or two, at the rapid rate at which they are increasing, we shall have to devote considerable space to descriptions of the flowers: this, however, we shall be happy to do, if our friends will only be careful in sending us such notices as will convey a good idea of the flowers. The camellia is so popular a plant, and so much admired, and new varieties of merit are so much sought after, that we shall always be glad to make our pages the medium for communicating the earliest information respecting new varieties. Since our notice of Mr. Wilder's seedling, (p. 25,) we have been favored with the following descriptions of two other fine new varieties.

Camellia japonica var. *Meta*.—A beautiful seedling camellia, to which the above name has been given, is now in flower in the collection of plants of Mrs. J. Lorillard, Manhattanville, N. Y. The following is the description of the flower:—Leaves three and a half inches long and two and a half wide, nearly flat, oblong, slightly acuminate, strongly dentated, smooth, glossy, light green, strongly veined, with a thick texture, resembling the *Pæonia flora*: bud very large, round, with greenish calceinal scales: flower with two rows of guard petals,

ten in number, recurved; inner ones small, arranged in four distinct circles, forming a large globular flower, three and a half inches in diameter, without stamens or pistil, a shade or two lighter than the Greville's red, and one of the most desirable varieties for a conservatory, from its bold and globular form. The parents were the old Middlemist fertilized by Greville's red.

Mr. James Carroll, the gardener, deserves much credit for his perseverance in originating this fine variety, and for the care and interest which he takes in this collection of plants: having charge of the farm, his time is necessarily limited to that of the green-house; his plants, nevertheless, from their cleanliness and thrifty appearance, will bear comparing with our best collections.—*Yours, T. Dunlap, Harlem, N. Y., Feb. 1841.*

Camellia japonica var.—The following description of a new camellia, raised by Mr. Samuel Feast, of Baltimore, we received from the hand of a kind correspondent:—

You will no doubt be glad to hear of the success of horticulturists in this region; I therefore apprise you of the fact, that Mr. Samuel Feast has now in bloom one of the best, if not the very best, seedling camellias that has been produced in this country. I might say the best that has been produced here or *elsewhere*, I believe; but as I have not seen all the seedlings produced in Europe, though I have seen a great many, I will only embrace American seedlings. The flower of Mr. Feast's seedling is of the largest class, very double, with very broad petals. At a few feet distance it appears perfectly white, but on a close examination, an occasional very delicate flake of deep rose is observed towards the base of each petal; and numerous extremely fine specks or spots of rose are sprinkled over them. The great breadth of the petals appears to render the expansion of the flower somewhat difficult and tedious; but even this would not be objectionable to many, as the expanded petals remain perfect much longer than I ever observed in any other variety. The flower now open has been expanding nearly two weeks; it has about ten rows of petals fully expanded, and those yet to unfold will afford fifteen or twenty rows more. This is the second flower that has bloomed this season on the same plant. The first remained perfect nearly three weeks, and would have continued much longer, but it was injured by water during an extremely wet season. The foliage of the plant is noble, and

every way fine: I am not sufficiently versed in these matters, to be more particular. Mr. Feast thinks one of the varieties from which this seedling was produced, was the *Wellbankiana*, but he has no means of even guessing at the other. Mr. Feast has a very large number of seedling camellias, many of them ready to bloom. His seedling roses are very numerous, and valuable additions to our collections. His seedling azaleas are also very numerous and fine; some of them very distinct varieties. Mr. Feast is so *silent* himself, on this subject, that I have determined he shall have some of the advantage as well as honor of his own labors; *nolens volens*.—Yours, *An Amateur, Baltimore, Feb., 1841.*

[We are most happy to hear of the determination of our correspondent to bring Mr. Feast's productions before the public: he has raised too many fine things, to have them remain unknown, as they are, in a great degree, to a portion of the amateur cultivators throughout the country. The only fault we have to find with some of our Baltimore friends, is their great modesty, which prevents them from claiming the merit which truly belongs to them, for the production of some of the finest plants that have ever been raised in this country.—*Ed.*]

We have also received from Mrs. Arnold, of New Bedford, a flower from a plant obtained from seed by herself, which has blossomed for the first time the present season. The flower somewhat resembles the old *Middlemist*, both in color and shape, but is fuller of petals in the centre, and forms a bolder flower: the foliage is large, bright green, smooth, and glossy. The specimen had somewhat faded when it reached us, but, so far as we could judge, we should deem it a very pretty variety. We are not informed what were the parents of this variety.

Camellia japonica var. *americana*.—It will be recollected, that Mr. Dunlap described four of his new seedling camellias in our last volume, (VI., p. 23.) Since that period, Mr. Dunlap states they have flowered again. *C. var. americana* fully answers the expectations which were first formed of it. It is a fine and distinct variety. There is, however, an error in the description above referred to: the ground color is *blush*, and not white, as there described.—*T. Dunlap, Harlem, N. Y.*

Camellia japonica var. *Wilderi*.—This is the name Mr. Wilder has applied to his new seedling camellia. If he was

desirous of identifying his name, as we suggested in our notice of the variety, with the cultivation of the camellia, as one of its most ardent admirers, it would be a hundred chances to one if he were ever to raise a plant which would gain him more credit. A second flower has expanded, and it fully equals the first. There can be no doubt that its full and perfect character will remain permanent.—*Ed.*

Camellia japonica var. *Flòyi*.—Since we noticed the appearance of the *Iconography of the Camellia*, by the Abbe Berlèse, twelve more numbers have been received, containing twenty-four plates. Among the varieties figured is the C. var. *Flòyi*, or Grand Frederic, as it has been called by the French and German nurserymen. We have been quite surprised to see that the Abbe has figured it in his *Iconography*, as well as described it in his *Monograph*, of the camellia, under the name of Grand Frederic. It may be well enough for the dishonest purposes of some of the French and German nurserymen that they should apply new names to new foreign camellias, in order to bring them out at high prices, as seedling productions, but it would not be supposed that an author of the information of the Abbe, would countenance such imposition in describing the flowers. It is apparent, however, that he has done so; he could not be ignorant of its true appellation, as he received the first plant, which he ever possessed of the *Flòyi*, from Mr. Wilder, long before his *Monograph* appeared, with a history and description of the plant: the drawing in the *Iconography* was taken from a flower which opened on this identical plant, and the description drawn up from the same.

We trust that the Abbe Berlèse will soon correct and explain this error, by cancelling the plate of the Grand Frederic, and giving one in its place under the true name of *Flòyi*: this would be no more than an act of justice to Mr. Floy, the raiser of this most magnificent flower, and a mark of respect to Mr. Wilder, to whose liberality he is indebted for a fine healthy plant, and a history of the variety.—*Ed.*

Fuchsia corymbiflora.—A plant of this new and most brilliant species has been imported by Mr. Wilder. The flowers appear in a large raceme, elevated above the foliage. Each individual flower is more than an inch long. It is a native of Peru, and was raised from seed received from thence.

New Verbenas.—Mr. Howell, gardener to C. F. Rockwell, Norwich, Conn., has raised several new and fine verbenas. He has promised to send us a description of them.

REVIEWS.

ART. I. *Agricultural Addresses delivered at New Haven, Norwich, and Hartford, Conn., at the County Cattle Shows, in the year 1840.* By HENRY COLMAN, Commissioner of the Agricultural Survey of Massachusetts. 8vo., 72 pages. Boston, 1840.

WE have, within the two years past, noticed from time to time, the agricultural reports which have been made by Mr. Colman, the commissioner for conducting the agricultural survey of the State. They have been written out with a great deal of labor, and have contained a great variety of information relative to the practice of agriculture in Massachusetts. We have now before us, three addresses, delivered last autumn, at the County Cattle Shows of New Haven, Norwich, and Hartford, each of which are very interesting productions, and well worthy of perusal by all who feel any interest in the progress of agricultural improvement. Mr. Colman has long devoted his attention to this subject, and the information which he has been able to treasure up while in the discharge of his duties, as commissioner, has enabled him, by his close observation of facts, to give much interesting and valuable matter in his addresses. We have not room for many extracts, but we cannot pass over the addresses without selecting a few paragraphs.

The address to the society of New Haven county commences with a just view of the importance of agriculture upon the prosperity of the country, which is deserving of attention.

Agriculture is the great art of life. In an economical view, it constitutes the subsistence of man. Eating and drinking are deemed vulgar employments; yet who, even among the exquisite of the transcendental school, is not compelled to conform to this fashion. The body is often spoken of with disdain, as though there were something degrading in its material elements. In such cases, a reflection is cast upon the divine skill and beneficence in one of their most wonderful exhibitions. But is there not an electric chain of sympathy between body and mind? What is to become of our philosophy, without bread and meat? How is genius to speed her flight, or the fires of the imagination to be kept bright, unless this same body, the dwelling place of the etherial guest, be maintained in its health, elasticity, and vigor? It is calculated, that if the harvests of a single year should fail, the whole of the human race must perish. In our latitude, the earth yields nothing unasked and unwoo-

ed. All of food and of clothing, all that sustains and protects the body, is the product of agricultural labor in some of its various forms.

Agriculture is the foundation of wealth. The sea renders her tribute; but the earth presents to skill and industry richer and infinitely varied contributions. Money is not wealth. It is only the representative of wealth. Money is coveted because it can command labor; but of what use would it be if labor would not be commanded? What would it avail to possess all the riches of Potosi, if thereby we could not acquire the products of agriculture? What are manufactures concerned in but these products? What freights the barks of commerce in their liquid flight, threading every channel and whitening every port, but the products of agriculture? Whence does the government derive its revenues, but from the fruits of agriculture? What constitutes the wealth of the country, but her cotton, hemp, sugar, rice, tobacco, wool, wheat, beef, and pork? Agriculture can only be considered as the creator of wealth. The merchant, the manufacturer, the sailor, the various artisans and tradesmen perform their part in making the products of agriculture more valuable; in transporting them so that the advantages of climate are equalized, and in putting them in a condition for use; but agriculture alone produces. Like the leader of Israel, she strikes the rock, the waters flow, and a famishing people are satisfied. She supplies, she feeds, she quickens all. Agriculture is the commanding interest of the country, with which no single interest, nor indeed all other interests of a secular nature combined, can be brought into competition.

Agriculture deserves the attention of liberal minds, as a science. Like many other sciences, it is in its infancy. We have broken only the outer crust; but it comprehends the mysteries of philosophy. It involves the whole science of life in the vegetable and animal kingdoms; the miracles of actual production, and the power which man may exercise in modifying vegetable and animal existence. The rearing of a tree, the maturing of a vegetable, the production of a flower, the forming of a race of animals, with shapes, and dispositions, and qualities, modified to a great extent according to your wishes, are in themselves miracles of a power delegated to man, which an intelligent mind recognizes as divine.

Of the pleasures to be derived from the pursuit of agriculture, the writer thus speaks:—

Agriculture, as a pursuit, commends itself to persons of refined taste and sentiment. I know how I shall startle the ear of city fastidiousness by such an assertion; but I rely upon your candor that I shall not offend by the expression of my honest convictions. There is much in the country that is vulgar, rude, and offensive. There is no occasion for this. This is not the fault of the country. But is there more of this in the country than is to be found in cities? These things depend much upon ourselves. The artificial forms of social intercourse do not prevail in the country as in the town—at least, they are not the same; but it is often delightful to lay aside, at least for a while, the buckram and the starch. I have been through life familiar with all classes of people. I have been for many years a

citizen in the cities and a farmer among the farmers. I have been a frequent visitor in city palaces, and many a time an indweller of the humblest mansions in the secluded parts of the country; and I must say, without derogating from the refinements of the most improved society in the cities, that the comparison in respect to courtesy and civility would not turn out to the disadvantage of the country. True politeness is not matter of mere form or manner, but of sentiment and heart. There are rude and vulgar people every where; but will not a sober judgment pronounce it as great a rudeness to be sent knowingly away from the door of one who calls herself a friend, by a servant with a lie put in his mouth, as to be received by the kind woman who welcomes us heartily at her wash-tub or her spinning-wheel, and sweeps a place for us, without apology, to sit down at her kitchen fire? You will pardon the homeliness of my illustrations. You may thread your beautiful valley from the ocean to the mountains; you may, as I have done, follow the silver stream, whose honored name is borne by your Commonwealth, from the place where it deposits its contributions in the mighty treasury of the sea, to its gushing sources under the snow-clad summits of the north, and traverse every State whose borders are laved by its gentle waters, and good manners on your part will be invariably met with a corresponding civility. Excepting among the vicious and depraved, you will find no rudeness, unless you are so unfortunate as to provoke it by your own arrogance.

It is folly to carry city manners and customs into the country. This destroys the simplicity which constitutes the charm of rural life. If you have no real taste for rural pleasures, no interest in rural concerns, no disposition for rural labors; if you are afraid of soiling your hands or browning your cheeks; if you can make no friends with the flocks that whiten the fields, nor the birds that make the hills and forests vocal with melody; if you are unwilling that the earliest rays of the dawn should disturb your repose, and your heart kindles with no enthusiasm in the golden sunset, then flee the country as you would the Siberian desert. It would be to you only a land of discomfort and solitude.

The closing remarks, in relation to horticulture, will find a response among all our readers:—

The vast creation of God, the centre and source of good, is every where radiant with beauty. From the shell that lies buried at the depths of the ocean, to the twinkling star that floats in the still more profound depths of the firmament, through all the forms of material and animated existence, beauty, beauty, beauty prevails. In the floral kingdom it appears in an infinite variety, in an unstinted and even a richer profusion than in other departments of nature. While these contributions are thrown out so lavishly at our feet, and a taste for flowers seems almost an instinct of nature, and is one of the most innocent and refined sentiments which we can cultivate, let us indulge and gratify it to the utmost extent, wherever leisure, opportunity, and fortune give us the means. There is no danger of an excess, under those reasonable restrictions which all our sentiments demand. "But," says some cynical objector, "flowers are only to please the eye." And why should not the eye be pleased? What

sense may be more innocently gratified? They are among the most simple, and at the same time among the cheapest, luxuries in which we can indulge.

The taste for flowers, every where increasing among us, is an omen for good. Let us adorn our parlors, door-ways, yards, and road-sides with trees, and shrubs, and flowers. What a delight do they give to the passer-by! What favorable impressions do they at once excite towards those who cultivate them for their own gratification, and find, after all, their chief pleasure in the gratification which they afford to others! What an affecting charm, associated as it is with some of the best sentiments of our nature, do they give to the sad dwelling places of the departed and beloved!

The moral influences of such embellishments deserve our consideration. I do not mean simply the substitution of such refined tastes and pursuits, in place of the gratification of the lower appetites. This is no small matter. But another influence should not be overlooked.

Every one familiar with human life must be sensible that mere personal neatness and order are themselves securities of virtue. As we cultivate these habits, and in respect to our residences and the things and objects around us, make a study of rendering them orderly and beautiful, and of adding to them the highest embellishments of art, our own self-respect is greatly increased. Next to religious principle, nothing operates more than self-respect, as a safeguard of virtue and a stimulant to excellence.

The direct tendency of all such embellishments in our grounds and habitations is to multiply the attractions of home, and to strengthen the domestic ties. It is the glory of New England that these precious ties are no where stronger or more sacred. I would bind her children, if possible, by chains a thousand times more enduring. In all my journeyings into other lands, favored as they may be by the highest advantages of climate and soil, I come back to New England with all the enthusiasm of a first love, and a filial affection, which, if possible, has only gained new strength from absence. Indeed, there is every thing in her to love and honor. Let us seek to render every spot of her rude territory beautiful. To the eminent picturesqueness of her natural scenery, adding the triumphs of an industrious, and skilful, and tasteful cultivation, every substantial want of our nature will be supplied, every refined sentiment of the mind gratified; and the true New England heart will ask no other Eden this side of that better country where flowers bloom with a radiance which never fades, and "one unbounded and eternal spring encircles all."

Mr. Colman, during the past year, from a feeble state of health, was induced to travel: he visited the West to gain some information relative to the agriculture of that fertile region; but, if we may judge from the remarks which he has frequently thrown out throughout his addresses, and the comparison which he has instituted between the agriculture of New England and the West, we should conclude that he was no friend to emigration; and we believe his views well founded. Agri-

culture can be made profitable in New England, and no enterprising individual would leave its soil to seek wealth in the valleys of the fertile West.

The condition of farming in New England is fully portrayed in the following extract:—

The farmers of New England have every reason to thank God for the condition in which they are placed. They need not sigh for more genial climes, nor more fertile soils. These they cannot have without dreadful abatements of health and comfort. Of all the conditions on earth which it has been my lot to see or to read of, I am bold to aver, that I know of none more favorable to health, competence, enjoyment, and intellectual and moral improvement, than that enjoyed by the rural population of New England. I despise the contempt with which some pretend to look down upon us; and the opprobrium which they have the impudence to cast upon our habits of thrift and frugality. I deem it my highest boast that I am a New England man and a Yankee. I do not ask to have a living without labor. This would be asking for a curse instead of a blessing, and a boon for which I have no claim. I only ask that a living shall be secure to me with reasonable labor, and this New England, in her various departments of industry, promises to all her children.

Better than all this, more than any other community in our country, New England is one common brotherhood; linked together by a common sympathy, a common origin, and the interchange of good offices. In our civil and religious blessings, where is a community more favored? Where are the means of education more extended; the institutions of religion better maintained; the public peace more quiet; the standard of morals higher; the course of justice more established: and the courtesies of life more freely rendered? Where is the spirit of inquiry and improvement more active, and Christian benevolence and philanthropy more prompt and diffusive?

From the beautiful prairies of the great Western valley, fertile as the banks of the Nile, and magnificent beyond description, I yet return to my native home in New England with all the warmth of a first love. Her secluded valleys, her verdant meadows, her rounded summits, her dense forests, her rocky mountains, her crystal lakes, her ocean-bound shores, her silver streams, her gushing springs, are all charming to me. Here, too, my friends and brethren dwell. I am satisfied to live under her stormy skies; to encounter her bristling tempests; to dig in her hard soil; for the mind as well as the body is braced by the exposure and the toil. In the midst of what others deem evils, I see innumerable compensations, for which I look in vain to other countries and climes apparently more favored. In whatever direction I turn my eyes, there is every where such an exuberance of blessings to those who will perform their duty, that it would be the height of ingratitude to complain, and the height of folly to abandon a certain good for that which is at best uncertain and doubtful. I cling to her with the warmest affection of a child; and, having been so long sheltered and nourished by her never-failing care and kindness, I ask only that I may find my last resting place in the lap which gave me birth.

These addresses are full of interest, and we only regret that we have not the space to give more copious extracts. Mr. Colman has rendered essential service to the Commonwealth, and he deserves praise for his unceasing efforts to elevate the character and standing of the farming community.

ART. II. *The Boston Journal of Natural History, containing papers and communications read before the Boston Society of Natural History.* Vol. III., No. 3. 8vo. Boston, 1840.

WE have already mentioned the appearance of this number, but we have not found the opportunity to give it our especial notice. Its contents are not so interesting to our readers as those of some of the preceding numbers: it contains one article, however, which will be read with pleasure by every botanist. We allude to the communication of Mr. Tuckerman, entitled "A further Enumeration of some New England Lichens," being a continuation of the excellent paper which appeared in Vol. II., No:2, and reviewed in our V., p. 299. Upwards of seventy-five species are enumerated. Mr. Tuckerman has contributed greatly to the Cryptogamic flora of this country, and his papers have probably done as much towards the elucidation of the study of the New England species of this curious tribe of vegetation, as those of any previous writer.

The journal is filled with excellent papers upon subjects connected with natural history, and we only regret that we cannot find more among them from which we might glean information which would be interesting to our readers. Very few botanical papers have been published, those of Mr. Tuckerman's being by far the most extensive.

The society is extending in usefulness, and we trust that it will meet with every success in the accomplishment of its objects.

ART. III. *An Address delivered before the Berkshire Agricultural Society, at Pittsfield, Oct. 8, 1840.* By H. A. S. DEARBORN. 8vo., pp. 24. Pittsfield, 1840.

THIS is a most interesting address, abounding in important statistical information, and showing the vast resources of the United States, as compared with other nations. Gen. Dearborn is an eloquent speaker as well as an eloquent writer, and we can well imagine the pleasure which must have been derived from listening to this address. The interest which he has always taken in rural pursuits, and the information which he is possessed of in relation to agriculture and horticulture, has enabled him to present to the farmers of Berkshire an address replete with sound reasoning and valuable statistical details, having an important bearing upon their profession. They could not have selected a gentleman who would have given more justice to the subject. The address commences with a happy allusion to the importance of agriculture.

Agriculture clothes and feeds nearly the whole civilized population of the globe; rigs, spreads the sails, and supplies the great bulk of the freight of navigation; and its multifarious products constitute the chief articles of trade. It has still other and higher claims to respect; and among the most imposing are its magnificent achievements and wide-spread conquests; and, however inapplicable these belligerent terms may appear, when applied to that pacific pursuit, it is confidently believed that they have been more truly glorious than those of all the fleets and armies which have ever triumphed on the deep and on the land: but in such a gradual, noiseless, and unobtrusive manner have they been accomplished, that they have not attracted that marked attention of the historian to which they are so pre-eminently entitled. There was no remarkable movement, which became the subject of universal speculation and comment—no splendid event—no startling incident—no dazzling pageantry, which either excited astonishment from their magnitude, or special and deep interest, from their direct or ultimate influence on the civil and military institutions of nations. Yet, when attentively examined, as the silent, peaceful, and unostentatious, but momentous causes of human advancement, and the extent of their influence is measured by the magnitude and real value of the results, the seemingly rash assertion which has been made, instead of being in any degree extravagant, will be found, on a thorough investigation, to be fully sustained by an array of facts, which put incredulity at defiance.

If wars and battles have rendered the names of victorious chieftains memorable throughout the world, has not agriculture given an infinitely more commendable, precious, and lasting fame to those

really great and good men who have acquired distinction as the benefactors, rather than the exterminators of their race? Will not the admirable characters and eminent deeds of the latter become more extensively known and more highly appreciated, as the bounds of human intelligence and civil liberty are enlarged; while the blood-stained laurels of the warrior will have perished, or be considered as revolting emblems of their crimes, and their martial feats, instead of exciting respect and emulation, will be converted into subjects of indignant execration and abhorrence?

Gen. Dearborn proceeds to speak of the adventurous spirit and perseverance of the first settlers of our territories, and of the wonderful results of the efforts of the husbandman. "Only fifty years since," he remarks, "and the whole of that broad and lengthened region which extends from the fountains of the Atlantic rivers to the western verge of the vale of the Mississippi was one entire wilderness: now it contains eleven states, and three flourishing territories; whose aggregate population amounts to more than seven millions."

These are the glorious achievements of untiring rural industry—the splendid triumphs of civilization—the indisputable victories and magnificent conquests of agriculture. Yes, of agriculture—for by the axe and the plough were laid the immense foundations on which was reared this mighty and prosperous republic; and its patriotic and independent yeomanry now constitute at least seven tenths of the entire population.

He next takes a view of the condition of commerce, navigation, agriculture, and manufactures, the four great divisions of human industry, in foreign countries, and to show how rapidly those nations have advanced, which have by a liberal policy promoted and encouraged agriculture and the arts. The efforts of Peter the Great to elevate Russia from the degraded position in which she stood, previous to his ascending the throne, are most forcibly and eloquently portrayed.

We have only room for the following statistical details of the commerce and agriculture of foreign nations, as compared with our own:—

Agriculture in the United States, besides supplying the demand for home consumption, furnishes three fourths of the exports of domestic articles, and manufactures only a tenth. The disparity, however, between the exports of the raw material and of manufactures, is conclusive evidence that we have not sufficiently extended the latter, and are too much dependent upon other nations for articles which could be as well made in our own.

Although the products of agriculture, in Great Britain, so much exceed those of manufactories, nearly the whole of her exports, which amount to more than \$500,000,000, are manufactured articles; and only one third of the exports of France are the products of agri-

culture; and that third chiefly consists of wine and fruits, which are in a complete state for consumption, and therefore cannot be enhanced in value, like the raw materials for mechanical industry; and of course constitute proper articles of export, as the surplus avails of indigenous labor, beyond the demand for home consumption."

But China and Japan present the most remarkable illustrations of that problem in political economy, as to how far a reliance may be reposed upon the internal industry and trade of a nation—the latter of which Adam Smith avers, in his great work on the *Wealth of Nations*, "to be worth all the foreign commerce put together."

Japan, although the area of its territory is double that of Great Britain and Ireland, and the population considerably larger, yet it has no foreign trade, except through the medium of one or two Dutch ships, and a very few Chinese, which are allowed to visit the single port of Naugassaki. So rigorous are the laws for regulating the intercourse with foreign nations, that the natives are absolutely prohibited from leaving the country for any purpose, under the severe penalty of not being allowed ever again to return.

China has an area of 5,250,000 square miles, and is therefore more than forty times as large as Great Britain, with a population of 300,000,000, and still the marine intercourse with other nations is inconsiderable, for the value of foreign products imported, exclusive of opium, amounts to only about fifteen or twenty millions of dollars, and the exports are less than fifty millions.

The industry of that nation must, consequently, depend almost entirely upon the internal market, and a limited trade with the bordering nations, for the disposal of its products; and which, if we assume as the data on which to form an estimate, the agricultural, manufacturing and mechanical labor of England, it must be truly enormous; for the value of the products of the soil would exceed \$15,000,000,000, and those of all other kinds of industry \$9,000,000,000.

China, like Japan, has but little navigation engaged in foreign trade, and that is chiefly limited to the islands of the Eastern Archipelago, and a few of the ports east of Coromandel.

How great and striking is the difference of the industrial condition of the United States, when contrasted with that of the two last nations which have been named, as well as with that of some of the most flourishing kingdoms of Europe. If the former nations have carried their restrictions on foreign trades too far, is it not possible that a still greater error has been committed in this, by opening too wide the gates of commerce, and giving a greater freedom to the introduction of the products of foreign industry, than is warranted by a just regard to the interests of our own citizens, or is consistent with those great conservative principles of national policy by which the most enlightened nations of Europe are governed?

The manufactured articles imported into this country in 1838, amounted to \$80,000,000; and although the value of our manufactures of wool and cotton is at least \$100,000,000, yet the imported fabrics of those materials exceed \$20,000,000, and including those of silk, the metals, and other substances, the amount received during the last ten years has been more than \$700,000,000.

With a population only one fifth less, and an actually settled territory fifteen times larger than that of Great Britain, the wool annually produced in the United States is only thirty million pounds, while

in the former it amounts to one hundred and sixty millions, or more than five times as much.

The nations of the Eastern continent have pursued a much more restricted system than has ever been adopted in this, in relation to foreign intercourse; and very generally given to their own subjects, almost the exclusive privilege of furnishing not only such products of the soil and of manufactories as are required for home consumption, but an amount of both sufficient to pay for the raw material to import from other countries, as well as for all such other articles of merchandize as are not indigenous, and do not come in competition with those that can be supplied by native industry and skill.

The statistical statements which are occasionally published by this and the European governments, in relation to those subjects, furnish the most ample elements for ascertaining the practical operation of the systems of political economy which have been adopted on both sides of the Atlantic.

The exports of Great Britain to France, in 1838, were valued at £1,500,000, to Russia £1,700,000, and to all Europe but £24,000,000 sterling; while to the United States they exceeded \$62,000,000. Thus it appears that with less than a sixth of the population of Russia, the exports to this country are more than seven times the value of those sent to that empire, and amount to more than half of the shipments to all the other continental nations, whose aggregate population is two hundred and ten millions, or fourteen times that of the United States; and when the value of British manufactures which are consumed in Russia is but ten cents per head, it amounts to at least five dollars for every soul in this country.

The cotton exported from this republic amounts to five hundred and ninety-six millions of pounds, and is valued at \$61,556,000; but if it was manufactured previously to its being shipped, the products would be worth \$440,000,000, and thus give an additional income to the industry of the country of \$378,000,000, which would be nearly quadruple the amount of our whole exports of domestic products.

ART. IV. *Literary Notices.*

Landscape Gardening and Rural Architecture, illustrated with many beautiful engravings, by A. J. Downing, Esq., is now in press; and will be published in April.

Lindley's Theory of Horticulture, with Notes, adapted to this country, by Mr. Downing, will also be published in the course of the spring.

Lieberg's Organic Chemistry, with Notes, by Dr. J. W. Webster, of Cambridge, will be published in April or May.

MISCELLANEOUS INTELLIGENCE.

ART. I. Domestic Notices.

The beautiful new Japan lilies have been imported by Mr. Wilder. The roots are sufficiently strong to bloom the coming season, when we hope we may have an opportunity of seeing the flowers. They are stated to be exceedingly splendid. Some notice of them will be found in our Vol. IV., p. 62, and V., p. 217.—*Ed.*

New Acacia.—I have a beautiful *Acacia*, grown from seed received from the botanists attached to the United States' Exploring Expedition. The seeds were gathered at Sydney, New South Wales.—*T. Hancock, Burlington, N. J., Feb., 1841.*

The Burlington Lyceum have voted to hold a horticultural exhibition in September next. The list of premiums will be reported at the board of managers, on the 12th, and, when printed, I will forward you.—*Id.*

Roses in flower.—I have seventeen varieties of roses, and twelve of camellias, now in flower.—*Id.*

Mount Auburn Cemetery.—At the meeting of the trustees of the cemetery, on the 8th of February, our correspondent, Mr. Russell, sent in his resignation of the office of superintendent. We have long been expecting he would give up his situation, as he some time since purchased a fine farm in Worcester, where he intends to reside. The trustees will find it difficult to procure a man to fill Mr. Russell's place. We learn that there are several applicants for the office, the most prominent of whom are Messrs. Banks and Willott. The claims of both are good, and either of them would discharge the duties faithfully. The decision has not yet been made.—*Ed.*

Growing plants in glass cases.—We are gratified in being able to state, that some experiments have been lately made by our amateur cultivators, upon the growth of plants in glass cases, after Mr. Ward's plan, described in our Vol. I., p. 24. J. I. Bowditch, Esq., of Boston, tried several bulbs in this manner the past fall; and, although the box was of rude construction, and imperfectly made, they flowered very beautifully, particularly the hyacinths. Mr. Bowditch intends, we believe, to have a case more fitly constructed, in which he can grow a greater variety of plants. Horace Gray, Esq. is also having a case made, in order to give this method a trial. With his love of plants, and the interest he takes in their cultivation, we do not doubt but that the experiment will fully succeed. At a future opportunity, we intend to offer some remarks upon Mr. Ward's system, and illustrate the method of planting and the appearance of the plants when in full growth, by engravings. Some improvements have been made in the construction of the cases, which renders them more convenient, and better adapted to the growth of the plants.—*Ed.*

Poudrette as a manure.—This new article is gradually coming more into use, and it is said, by those who have fairly tried it, to be a val-

uable manure. It has been used to considerable extent by the farmers on Long Island, N. Y., all of whom agree in recommending it as a most important manure. It is but a few years since it was first manufactured in the country, and it cannot yet be considered as having been fully tested.

Mr. Minor, formerly publisher of the *New York Farmer*, is the agent of the company, and they are now, after overcoming many obstacles thrown in the way, making preparations to manufacture it so extensively as to be able to supply all the demand. This they have not, heretofore, been able to do: they have now so completed their arrangements, as to be able to prepare a vast quantity of the article.

The materials from which the poudrette is manufactured, are acknowledged to be among the most powerful stimulants to vegetation. In undergoing the process of rendering them *inodorous*, and fit for transportation and immediate use, but a small part of their peculiar qualities are lost; and the objections which have always been made against it are entirely removed. When manure has to be transported any distance, the poudrette offers a great saving, as a quantity equivalent to several loads of horse manure can be conveyed any distance with the same ease and expense as a single cord of the former. From the testimony which has been given, we do not doubt the great utility of the poudrette. Messrs. Hovey & Co. are agents for the sale of the article.—*Ed.*

Preservation of Celery.—It will be recollected that our correspondent, Mr. J. W. Russell, sent us an excellent paper upon the cultivation of celery, which appeared in our last volume, (VI., p. 94.) Subsequently, we also published a communication from Mr. Russell, describing the best method of preserving the heads, through the winter. This plan was so different from any of the methods which have usually been practised, that many individuals thought it would not be attended with good success: we were almost led to doubt, ourselves; but, as we had always placed full confidence in Mr. Russell's opinions upon the cultivation of plants, we could not but believe the plan would answer well. It is therefore with much gratification that we are enabled to state, for the particular information of all who doubted the efficacy of Mr. Russell's method of preserving celery, that it has been fully tried by some of our friends. Col. Wilder informs us, that although he was doubtful of its good results, he determined to try a barrel of heads in Mr. Russell's manner, together with a quantity preserved in the cellar by the ordinary system. The result is, that the heads put down in the ordinary manner began to rot some time ago, and what few remain are nearly or quite decayed, and not fit for use. Quite different is it, however, with the other heads; the barrel was opened for the first time, since the celery was put in in November, a few days since, and every head appeared as fresh and firm as if it had just been dug from the ground. Several heads were taken out, but no difference was apparent between those at the top and those down in the barrel: not the least sign of decay was observed.

This experiment was made, under Mr. Wilder's care, and he is well satisfied that it is by far the surest and best method of preserving celery that he has ever tried. The heads are not only in

good order now, but they have the appearance of remaining so for one or two months to come: we may therefore safely recommend Mr. Russell's method above all others.—*Ed.*

New vegetable.—At the December meeting of the Pennsylvania Horticultural Society, Mr. Buist presented a specimen of a new vegetable from South America. It is called the *Sechium edule*, or *Siegos edulis*, one-seeded cucumber. It is stated to be unlike any thing cultivated in this country. In shape, it is similar to a bell pear; flesh solid; skin smooth, of a pale green color; and weighs from six to eight ounces. Each specimen, having been thirty-six days at sea, had germinated on the passage, and presented a singular appearance. From the eye, or apex, partially protruded a single flat seed, somewhat larger than a Lima bean, from which issued fibrous roots, and between the cotyledons the plumule. For the table, it is prepared in the same manner as squashes, and is said to be of more delicate flavor. We should be glad to receive from any of our Philadelphia friends a further account of this vegetable, with some notice of its habit of growth, &c., and, if possible, a drawing, representing its shape, &c.—*Ed.*

Pennsylvania Horticultural Society.—We have received the proceedings of the three last meetings of this Society: the Committee on Premiums made their report at the meeting of the 15th of December, accompanied with a schedule of the premiums for 1841. Some amendments were made, and the report was then adopted. The amount offered in premiums exceeds five hundred dollars, and includes a great variety of subjects. In our next number we shall give an abstract of this schedule, together with the dates of the meetings at which the objects are to be exhibited.—*Ed.*

Influence of Temperature on the vegetation of Seeds.—A correspondent of Silliman's *Journal* has communicated some experiments which he made, with the intention to show at what average temperature at noon various seeds will germinate, and how many days are requisite for them to vegetate at any given temperature. Thus he states that the Lima bean, at a temperature of 88°, (in the shade,) will appear above ground in seven days; at a temperature of 62° it requires twenty days. The marrowfat pea, at 51°, requires nineteen days, and at 74° only eleven days. Radishes vary with the temperature from six to twelve days. Thus the average temperature of any country, *other things being equal*, may be inferred with considerable accuracy from the periods of vegetation; for in looking over a long list of recorded experiments, he finds a great degree of uniformity in the process of germination, in ordinary circumstances. (*Silliman's Journal.*)

[These experiments teach the horticulturist a useful lesson. It is well known that the Lima bean is one of the most uncertain varieties to vegetate, when sown at the same time and under the same circumstances as the others. Cultivators often have the trouble of planting twice, and frequently three times, before they procure good plants. The experiments alluded to explain the cause. Sown about the middle of May, as they generally are, unless the weather is very warm, the seeds will not vegetate under from ten to twenty days: and if the weather should be accompanied with much rain, the seeds will rot in the ground. If, on the contrary, the beans are not

sown till the latter part of the month, when the temperature of the atmosphere is higher, they will come up in the course of five or six days, and will make a vigorous growth. Nothing is gained by too early planting. Peas sown about the middle of April often overtake those sown about the first of the month.—*Ed.*]

Destruction of the pea bug, (Bruchus pisi).—The same correspondent states that he has succeeded in ridding his peas of the bug, in the following manner:—Immediately after gathering the seed, he subjects them to the action of boiling water *one* minute: by this means he destroys the little grubs or larvæ, which at this time are just below the integuments of the pea, without destroying the vitality of the seeds. If the peas remain in the boiling water *four* minutes, most of them will be killed, but not all: of about forty peas thus heated last year, three vegetated, and are now growing. The corcle, he finds, is more tenacious of life than the cotyledons.—*Id.*

Horticulture in Wheeling, Va.—I am erecting a green-house, one hundred feet by sixteen feet, and will soon have it filled with plants. I have also in satisfactory operation a hot-house fifty-five feet long, and fourteen wide, on your plan, as described in Vol. III., p. 23, but covered (the hot water,) by boards only: the earth in the hot water cistern is about two and a half feet thick.—*Yours, J. Ritchie, Wheeling, Va., Feb. 1, 1841.*

Almond trees.—A sale of one hundred thousand almond trees, raised from seed, near New York, took place last November. We believe we have seen it stated that some of the trees had produced fruit; they would, probably, make good stocks for the peach or plum, if they possessed no other value. We do not doubt, however, but that the almond may be grown in this country as well as the peach.—*Ed.*

ART. II. Retrospective Criticism.

Horticulture in Baltimore. (P. 8.)—Dear Sir:—I perceive, in looking over your Magazine, that you show rather a disposition not to give us our due in the progress we have made in horticulture, in saying that we have done nothing in Baltimore. I can assure you there has been a great deal accomplished. We have a fine cemetery containing nearly a hundred acres, all walled round, and in good condition: many interments have been made in it already. The situation is excellent, and for picturesque beauty there is none that will surpass it in the country. The grounds formerly belonged to the estate of the late Robert Oliver, Esq., and it is now called the Green Mount Cemetery: the distance about a mile north from the city. There is also another cemetery now being laid out, to the east, which will be finished soon.

There have been several green-houses built in the city, the past year, and great improvements have taken place. Several cultivators have become competitors for the beauty of their collections, which

has created more taste and zeal. You seem to imagine, because we do not make a great noise about every thing that we cultivate, that we are doing nothing in horticulture. No sir: I must candidly inform you, if you can do us no good, let us alone, or we will show you some of the best seedling camellias ever raised in this country.—*Yours, J. Feast, Baltimore, Jan., 1841.*

[This is the first intimation we have had, from any of our numerous friends in Baltimore, that we have not done justice to the horticulturists of that city; and we gladly insert the above, in order to show that we are gratified in being able to make amends, by correcting any errors we may have inadvertently committed. We do not, however, as we have stated at other times, where we have spoken in the same manner of the state of horticulture in other places, take the fault to ourselves. We always invite our correspondents, by timely notice, to send us an account of the progress of horticulture, in order that we may give a correct account of what has been accomplished every year; and when they fail to comply with our requests, we procure our information from the best sources, generally the local journals devoted to agriculture and gardening. We are pleased to learn that our Baltimore friends are *going ahead*, and we trust that when we shall make our next retrospective view of horticulture, they will send us an account of what has been done in season, and save us from committing errors, and themselves the trouble of correcting them after they have been made.—*Ed.*]

Planting detached beds of fertile and sterile strawberry plants. (Vol. VI., p. 229.)—I noticed, in your last July number, a new method to make strawberry beds, by planting so many males to one female, which indeed is a new way of amalgamation. Never mind your correspondent: he can throw all his away if he likes, for I am convinced that no man would be so foolish as to purchase so many of one and the other to plant. I wish you would correct this error, for I am sure you are able; advise cultivators to throw away all the males, and then they will have a much better crop, as experience has taught all those who have raised this delicious fruit. Such an operation puts individuals to great trouble. For instance, what would you think of me, if I were to send to Messrs. Hovey & Co., and procure a hundred plants of their seedling, and twenty of them males? [If our correspondent had read our description of this fine variety, he would have seen that the plants are *all fertile*.—*Ed.*] I can answer for you. Perhaps this is too many, and the bed will run out in a year or two, and be fruitless. Now, if I want a good strawberry bed, in fine bearing condition, I would examine all the plants when in flower, and eradicate all those sterile plants, that are so choice and kept separate, and destroy them as weeds, wishing them no longer to encumber the ground. So far as my experience goes, I do not see how any person can keep their beds in proper condition, than in the way I have described.—*Yours truly, J. Feast, Baltimore, Jan., 1841.*

[We are inclined to the opinion that there are no *male* strawberry plants. There are some which are *sterile*, but their sterility arises from some imperfection in the character of the variety; if such is the case, as we believe it to be, it is better to discard all but the fertile plants, as our correspondent remarks.—*Ed.*]

ART. III. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Pot and Sweet Herbs.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Parsley, per box,.....	20	25	
Chenangoes, } per barrel,...	1 25	1 87½		Sage, per pound,.....	17	20	
Common, } per bushel,...	1 00	1 25		Marjorum, per bunch,.....	6	12½	
Eastports, } per barrel,...	2 00	2 25		Savory, per bunch,.....	6	12½	
English, } per bushel,...	1 50			Spoarmint, (green,) pr. b'ch,	25	—	
Sweet, per bushel,.....	1 25	1 50					
Turnips:				<i>Squashes and Pumpkins.</i>			
Common, per bushel,....	25	87½		Squashes, per pound:			
Ruta Baga, per bushel,...	25	87½		Autumnal Marrow,.....	6	—	
French, per bushel,.....	25	87½		Winter crookneck,.....	5	6	
Onions:				Canada crookneck.....	6	—	
White, per bunch,.....	3	4		Pumpkins, each,.....	8	12½	
Red, per bunch,.....	3	4					
Yellow, per bushel,.....	62½	75		<i>Fruits.</i>			
White, per bushel,.....	75	1 00		Apples, dessert:			
Beets, per bushel,.....	50	62½		Common, per bushel,....	50	62½	
Carrots, per bushel,.....	50	—		Extra, per bushel,.....	75	1 00	
Parsnips, per bushel,.....	75	—		Baldwins, per barrel,....	2 00	2 25	
Radishes, per bunch,....	12½	—		Russets, per barrel,....	1 75	2 00	
Shallots, per pound,.....	20	—		Greenings, per barrel,....	2 00	—	
Garlic, per pound,.....	12½	—		Pearmain, per barrel,....	2 00	—	
Horseradish, per pound....	10	12½		Sweet, per barrel,.....	2 00	—	
				Dried apples, per pound,.	3½	4½	
<i>Cabbages, Salads, &c.</i>				Pears, per half peck:			
Cabbages, per dozen:				Chaumontelle,.....	50	—	
Savoy,.....	87½	50		St. Germain, per doz....	—	—	
Drumhead,.....	50	75		St. Michael Archangel, }	—	—	
Red Dutch,.....	75	—		per dozen,.....	—	—	
Brocoli, each,.....	—	—		Baking, per bushel,.....	2 00	2 50	
Cauliflowers, each,.....	12½	25		Grapes, per pound:			
Celery, per root:				Malaga,.....	20	25	
Common,.....	8	12½		Pine-apples, each,.....	37½	50	
Giant red and white,....	12½	20		Cranberries, per bushel,...	1 75	2 00	
Spinach, per half peck,...	12½	—		Lemons, per dozen,....	20	25	
Dandelions, per half peck,.	37½	—		Oranges, per dozen:			
Lettuce, per head,.....	12½	—		Sicily,.....	20	25	
Tomatoes, per half peck,...	—	—		Havana, (sweet),.....	50	75	
Cucumbers, (pickled) pr gal.	25	—		Chestnuts, per bushel,....	2 25	2 50	
Peppers, (pickled) per gallon	87½	—		Walnuts, per bushel,....	2 00	2 50	
				Castana,.....	—	—	
				Almonds, (sweet,) per pound,	—	—	

REMARKS.—Since our last report there has not been much to note: the weather has continued mild, and for the month of February it must be considered as unusually pleasant; there was some snow in the early part of the month, which covered the ground, and which yet partly remains, affording an excellent protection from the severity of the frost to vegetables and plants.

The market offers but little alteration. Potatoes are rather firmer, and we have quoted a slight advance; the stock is getting down, but arrivals are expected by the latter part of the month; sweet potatoes yet remain, and in fine preservation. Turnips abundant and cheap. Onions are yet heavy. Beets, carrots, &c. are abundant. Radishes have come to hand for some time, but they are now much better than they have been; another week will bring them forward rapidly. Horseradish plentiful and good.

Cabbages are yet abundant and good; Savoys were never brought in in larger quantities; drumheads and red Dutch are each large and good. Some cauliflowers yet remain, but they are of rather inferior quality. Celery is now mostly received from New York; it comes in a somewhat different shape from the usual mode of selling it in our market; three or four roots are tied together, making a flat bunch; these bunches sell from twenty to twenty-five cents, according to goodness: this article should be raised in a sufficient quantity by our gardeners to supply the market without relying upon New York: it affords a good profit. We may here mention that we have been gratified to learn that Mr. Russell's practice of keeping celery, mentioned in the last volume of this Magazine, is an excellent one, fully insuring a supply in good condition throughout the spring. Spinach is again abundant, and a few dandelions are also brought in. Lettuce now comes in large and fine, and is improving every day. Our quotations of parsley are by the box, (holding about a quart.) Squashes are nearly all gone; what remain sell at our prices. No West Indias have yet arrived.

Apples have advanced slightly since our last; Baldwins are held at higher rates, though other kinds are about the same; the advance in prices, however, since October, has not been so much as the loss in decay; and, making this allowance, they are not so dear as they were in the autumn. Baking pears remain the same; the remaining stock is rather inferior. Grapes abundant and poor. A few pine-apples have been received, which sold at quotations. Cranberries have got up a little as the season draws to a close. Lemons and oranges are very plentiful and cheap. The market appears more animated, and another month will probably show an improvement in most articles, which are now very low for the season.—*M. T., Boston, Feb. 26, 1841.*

HORTICULTURAL MEMORANDA

FOR MARCH.

FRUIT DEPARTMENT.

Grape vines.—If the directions have been observed, which we gave last month, the vines in the green-house or graperly will now have begun to swell their buds, which will soon break. The shoots

should be bent in a serpentine manner, if there is any appearance of their not breaking regularly: this will have the tendency to remedy them. As soon as they are fully out, tie up the shoots to the trellis. Give due quantities of air, in order to prevent them pushing weakly, and as soon as they are an inch or two long, they may have an occasional syringing. Vines in pots, now brought in, will soon break. Cuttings should be now put in, where a stock of young vines is wanted. Out-door grape vines, of the hardy kinds, should be pruned this month, if not done before.

Fruit trees, of all kinds, may be pruned the latter part of the month. Those trained to a wall or espalier should have their branches tied in.

Raspberries may be uncovered the latter part of the month, if the weather is mild.

Gooseberry and currant bushes should be pruned the latter part of the month.

Strawberry beds should also be uncovered the latter part of the month, unless the weather should be too cold.

Scions, for grafting, should be cut now, and placed away in a box of earth, with their lower ends inserted in the soil.

FLOWER DEPARTMENT.

Camellias will now be making their growth. Syringe them freely, and keep the soil liberally watered. Shading part of the day from the sun, will be of advantage to the plants. Inarching and grafting may be performed now.

Verbenas will now be flowering: if many plants are wanted for the open ground, in summer, they should now be propagated by cuttings or layers.

Dahlias should be potted, if wanted to bloom early. The roots may be separated, or, if desirable to increase a choice variety, they may be propagated by cuttings. The seeds should now be sown, and the plants will flower well the first year.

Geraniums will now be throwing up their flower buds. Give good supplies of water at the roots.

Oxalises, done flowering, should be sparingly watered.

Cactuses will now be coming into bloom, and will require more water.

Ericas may be propagated from cuttings, with good success.

Tulip and hyacinth beds should be uncovered the latter part of the month, unless the weather remains severe.

Ranunculus beds, which have been covered with frames, should be opened in fine weather, to admit the fresh air.

Annual seeds, such as stocks, asters, balsams, coxcombs, &c., should be now sown in pots, in the hot-bed or in the green-house.

Frames containing plants should be opened, and the fresh air and sun admitted.

Green-house plants, of all kinds, may now be propagated by cuttings.

Calceolarias will now be throwing up their flower stems, and they must be freely watered.

Auriculas and polyanthuses should be top-dressed.

Carnations, in frames, should be exposed to the air and sun, in fine weather.

THE MAGAZINE

OF

HORTICULTURE.

APRIL, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *Some Remarks on the state of Horticulture in New Jersey; with Notices of several Gardens in Princeton.* By
A CORRESPONDENT.

SIR,—In an article entitled “A Retrospective View of the Progress of Horticulture in the United States, during the past year,” which appeared in your valuable Magazine for January, 1840, I think some little injustice was done to the State of New Jersey. Among other things, you observe that “with the exception of Burlington and Princeton, horticulture can scarcely be said to be practised to any extent whatever, other than what may consist in the cultivation of large peach and apple orchards, and immense crops of melons.”

Now I am well aware of our deficiencies in this respect, and am willing to admit that much less attention is bestowed upon the subject of horticulture, than its importance demands. But it is nevertheless due to the people of New Jersey, to say, that, within a few years past, a most sensible improvement has taken place, and that in the zeal with which such pursuits are now engaged in, she would probably not suffer by a comparison with any of her sister States. I know that you would not willingly do injustice to us, and that you will receive this assurance with great satisfaction. I do not now propose going into evidence, for the purpose of proving that this representation is correct, but, if you could be prevailed upon, during the ensuing season, to pay a visit to our State,

I feel quite confident that you would bear most willing testimony to its truth.

Many of the richest contributions to the annual exhibitions of the Horticultural Society of Pennsylvania are sent from New Jersey. In addition to this, we have exhibitions of our own, which, although not quite so extensive as those in Philadelphia, yet evince perhaps quite as much zeal and taste. One of the choicest and most select nurseries in the country, is that of Mr. Reeves, in the county of Salem, who has also been very successful as a grower of the dahlia. There are also some fine nurseries in the county of Middlesex. In the city of Newark, there are some excellent gardens, well stocked with fruit trees of a superior kind; and several green-houses, with very respectable collections of plants. Mr. Norris has, within the last year, erected a new and beautiful house, which is heated both by flues and hot water pipes: his old house he designs for a graper. There are, I suspect, more green-houses in the city of Burlington, than in any other town of the same size in the United States.

But I am wandering from the purpose which I had in addressing you. My object in writing was to notice more particularly a few collections of plants which are to be found in Princeton.

One of the neatest and most tasteful houses of the kind which I have ever seen, is one which has been erected within the past year for Mr. T. A. Stockton. It was built by Mr. Buist, of Philadelphia, a brother of the distinguished florist, a young architect of much promise. It is an octagon building, forty feet long and twenty-four wide, with a span roof. On the north side is the green-house, and on the south the hot-house, separated from each other by a glass partition. Mr. Stockton's stock of plants is at present small, but he proposes making large additions to it, and, with his wealth and taste, it will no doubt soon be a rich and choice collection.

Mr. I. R. Thompson's green-house is not large, but is beautifully arranged, communicating as it does with his library. His plants are well selected, and are in admirable condition. Among the rest are some noble canellias, which have been blooming for some time very freely, such as *speciosa*, *Lándrethi*, *fimbriata*, double white, *rubicaulis*, &c. Mr. Thompson's place, altogether, is one of the finest in the State. The grounds about his house are laid out with great taste, and are

kept in perfect order. No where have I seen so beautiful a lawn, or a better collection of ornamental trees.

The largest collection of plants in this vicinity, is that of R. S. Field, Esq. The house appropriated to them is about fifty-five feet long, and is divided into two apartments, one for the green-house, and the other for the hot-house plants. Mr. Field has been fortunate in securing the services of one of the most skilful and experienced gardeners in this country, Mr. Edward Noice. In the green-house, among the camelias which are now, or have very recently been in bloom, are the double white, *fimbriata*, *speciosa*, *elata*, *Chandleri*, *imbricata*, *conspicua*, *Fløyi*, *élegans*, *eclipse*, *maliflora*, *Rössii*, *Gilesii*, *conchiflora*, *speciosa rubra*, *Lady Hume's blush*, *florida*, *Rosa sinensis*, &c. The heaths are in excellent condition, and some of them blooming beautifully. Mr. Field intends adding largely to his collection of this interesting plant, the cultivation of which has been so much neglected in this country. Here are some fine plants of the *E'pacris grandiflora*, *palludosa*, and *pulchella*. *Lechenaúltia formosa* is literally covered with its dazzling little flowers. The collection of geraniums is large and valuable, and they are just coming into bloom: there are several seedlings among these, of great merit. The lemon and orange trees are loaded with fruit of the largest size.

Among the plants worthy of notice, in the hot-house, are *Musa dácca* and *Cavendishii*, a noble specimen of *Urània speciosa*, *Atrocárpus integrifolia*, *Chamærops hystrix*, *Dracæna braziliensis*, *Astrapæa Wallichii*, *Cycas revolúta*, *Bonapártea júncea*, *Méspilus japónica*, *Euphórbia spléndens* and *Jacquinaeflora*, *Poinsettia pulcherrima*, *Russélia júncea*, *Ardisia crenulata* and *solanacea*, *Ixora coccinea*, *Pavetta*, *álba*, and *crocata*, *Acácia armata*, *conspicua*, *glaucescens*, *pubescens*, and *spectabilis*, *Blétia Tankervilleæ*, *Myrtus tomentósus*, *Sirelitzia reginæ*, *Ficus vistata*, *macrophylla*, *elástica*, *austrális*, and *nitida*, *Passiflora edulis*, *Kermesina*, and *alata*, the latter trained to the rafters, and blooming profusely; *Sálvia pátens*, *Gloxinia spléndens*, *grandiflora*, and *speciosa álba*, several kinds of *jasamine*, and the different varieties of the cactus.

In front of the building, and extending the whole length of it, is a grape border. The vines are planted outside the house, but are introduced in the spring, and trained up the rafters. Some fine specimens of foreign grapes raised here,

were sent last summer to the Pennsylvania Horticultural Society, for which an honorary premium was awarded.

Yours, respectfully,

A CORRESPONDENT.

Princeton, N. J., March 1, 1841.

It gives us great pleasure to lay the communication of our correspondent before our readers: if we have unintentionally done injustice to the State of New Jersey, in our remarks upon the progress which she has made in horticulture, nothing can give us more satisfaction than in having our error corrected, while, at the same time, we are enabled to offer so interesting an account of what has been accomplished. It will always be our object, in our annual retrospect of horticulture, to give as correct an account of what has been done as is in our power, but if any inadvertencies which we may make should draw out such an interesting communication of the actual state of things as we have offered above, we shall not view such misstatements as of so great importance. We may again repeat, what we have before stated, that it is impossible for us to know what has been accomplished in many places, and we therefore rely upon our friends for information. If they cannot comply with our requests, we state to the best of our knowledge, derived from our own inspection and other sources, what has been effected. The assistance of a few of our friends would give us the opportunity of doing justice to all.

We intend, as soon as the opportunity will offer, to visit our correspondent and friends in Princeton, as well as some other places in the State, and we do not doubt, from what he has stated, that we should be fully convinced of the truth of his remarks. Burlington is the only city where we have noticed any of the collections of plants; our visit to that place, together with our remarks upon the gardens and nurseries in that vicinity, will be found in our Vol. V. We were highly pleased with the gardens, and we only regretted that we could not visit the garden of Mr. Field, in Princeton, at which time we supposed it to be the only one of any note in the town. We shall not neglect the opportunity to visit our correspondent when we pass through the State again. In the mean time, we trust that he will continue to give us his assistance, and to keep us informed of the improvements which are making in horticulture, in various parts of the State.

ART. II. *Notices of Green-houses and Hot-houses, in and near Philadelphia.* No. 4. By A PHILADELPHIA AMATEUR.

Nursery of Peter Mackenzie, Spruce street, (between Schuylkill, Fifth and Sixth streets.)—Mr. Mackenzie is well known as one of the most successful growers of plants in the city or county of Philadelphia. His houses bear the highest testimony to his skill, and the constant beauty and vigor of his plants to his exertions in the cause of floral science.

Mr. Mackenzie's geranium house, (which we shall commence with,) faces the east, and is forty feet in length, and completely filled, on the large stage, with uncommonly vigorous plants, of the finest large flowering kinds; among the rarer we noticed Foster's Alicia, Dennis's Perfection, Garth's Perfection, Diomede, &c., and a quantity of hybridized seedlings, raised from the finest sorts. In the front are placed a large quantity of *Daphne indica*, ericas, gardenias, epacris, &c. In the arrangement to give effect and contrast to the whole, were fine plants of the *Citrus myrtifolia*, Mandarin, sweet oranges, &c.

The camellia house, the same size as the last, which we next entered, is stored with a fine number of vigorous thrifty looking plants, all of which are the production of the last three years. Among those in bloom were the following:—Gray's Invincible, Béalii (one of the finest in cultivation,) Elphinstonia, punctata, Rossii, Donckelaeri, ochroleuca, delicatissima, elegans, triumphans, Press's Eclipse, Lándrethi, variegata, álba pleno, rósea, Chándleri, conchiflora, imbricata, Pomponia, incarnata, candidissima, Colvillii, exímia, oxoniensis, tricolor, C. reticulata, &c., and a fine quantity of young stocks, of which more than a thousand will be fit for use the coming season. On the front, a large number of seedling azaleas, of which the greater proportion will bloom the coming spring; among the rest, we noticed the elegant seedling displayed by Mr. Mackenzie last season, which is decidedly the most beautiful of this gorgeous tribe. The mother plant he intends sending to England in a few weeks, with a figure of the flower. A very fine plant of the *Acacia floribunda* is situated in the centre of the house; every axil of its leaves pendent, with its lovely blossoms; and a

vigorous plant of the *Rhododéndron hybrida*, covered with strong buds; and also a fine *Witsénia corymbosa*. Along shelves, placed closely to the glass, are a number of seedling polyanthi, just beginning to exhibit their flower buds.

On entering the rose-house, which is eighty feet in length, facing east and west, we were particularly struck with the uncommon health, vigor, and beauty of the plants: these are Mr. Mackenzie's peculiar favorites. The collection is one of the finest we ever met with, and contains *all* the new varieties. Among those in a state of inflorescence were *Glorie de France* or *Monthly Cabbage*, *Noisette Lamarque*, *Isle de Bourbon*, *Hermosa*, *Madame Desprez*, *Marechal de Villiers*, *Bengal triumphans*, *Bon Silene*, *Triomphe de Luxembourg*, *La Reine*, *Victoire modeste*, *Noisette Amœna*, *Thea Camellia*, *Golcondi*, *Aurora*, *odorata*, *Faustine*, *Bengal celeste*, *Marguerite*, *Bourbon*, &c. Among the other plants were a fine stock of *Phlœx Drummóndii*, all the varieties, and a new finely fringed variety of the *Primula sinénsis*, &c.

The green-house, which we next visited, is thirty feet in length, the plants in which were in the finest health. In this department, the justice which Mr. Mackenzie deserves can scarcely be meted to him, as the constant demand for bouquets keeps him almost entirely bare of flowers, and the evening previous to our visit, almost every bloom had been sold. However, among those yet in flower, we noticed some seedling *metrosideros*, completely covered with buds; *Cinerària crinita*, *Kíngii*, and a seedling, as perfectly distinct from any one of the tribe as a plant possibly could be, (I will forward a description of the plant, when in full flower;) *Acácia genistifolia* and *dealbata*, very fine; *Senécio élegans álba*; *Cállia æthiópica*; *Tropæolum tricolorum*, &c.; *jasamines*, and some few *ericas*, and the new *Kennédya coccinea* or *Glycine coccinea*, completely covered with its brilliant scarlet blooms.

The hot-house, (which finishes our review,) is an elegant apartment, thirty feet in length. On the rafters, the finer sorts of *passiflora* are pendent with blooms; the *alata*, *Loudóni*, *racemosa*, &c., the *Ipomœa Horsfállia*, and others in rapid growth. Among the blooms were the *Poinséttii pulcherrima*, *Combrétum purpureum*, *Blétia Tankervillæ*, *Plumbago rósea*, *Rhípsalis salicornoides*, *Aloe vulgàris*, *justitias* var., *heliotropes*, &c. We noticed fine plants of the *Cròton pictum variegatum*, *Càcos flexuosa*, *Dracœnas* var., and a fine collection of epiphytes, or orchidaceous plants. The

Cacti are in fine health, and are one of the best collections in the country, containing all the finer and rarer varieties. We noticed a number of frames outside, filled with strong plants of carnations, pinks, new pentstemons, pansies, &c.

Green-houses and hot-houses of John Sherwood, Laurel Hill, (three and a half miles north of Philadelphia.)—Mr. Sherwood's establishment is one of the largest in the city or county of Philadelphia, immediately opposite the beautiful cemetery at Laurel Hill, the Mount Auburn of Philadelphia. His collection is varied and extensive, occupying over eight thousand square feet of glass. We will commence with the northern hot-house, which is over forty feet in length and facing the north-east, and contains some very rare plants: among the most remarkable is the *Doryánthes excélsa*, the largest plant in America, of the most vigorous growth and character. The flower-stem of this plant is thirty feet in height, crowned by a corymb of the most glittering crimson. Mr. Sherwood's plant will probably bloom next year. The leaves are over five feet in length, and the circumference of the whole about eighteen feet. The *Bonapártea júncea*, about twelve feet in circumference, a fine plant of the U'pas, or poison tree of Java, in fruit, a new *Furcræa* from Mexico, the leaves on the plant exceeding four feet in length, and the plant itself about fifteen feet in circumference; *Poinciána Giliésii*, *Phœnix declinàta*.

Among the plants in bloom, I noticed the *Poinséttia pulchérriima*, *Euphórbia Jacquinæflóra*, *Tillándsia amæ'na*, *Stre-lítzia reginæ*, the *Parkinsónia aculeàta* just displaying its buds, *Swietènia Mahágoni* in bloom, *Heliotrópium intermèdia*, which is cultivated principally for bouquets, the *Inga pulchérriima* and *paradóxica*. I noticed likewise the *Caméllia japónica* var. *mutábilis*, and *Rèevesii*, in perfection. On the front stage were planted out a fine lot of seedling camellias, several hundred in number, of distinct character and foliage, from which the floral world may expect something rare and beautiful, as they are raised entirely from the finest double varieties.

In the hot-beds, in pots, were a fine lot of the white Moss rose, engrafted upon the roots of the *índica*, all of which have finely taken, and are in vigorous growth, and also several plants of the rarer Indian varieties of azaleæ, engrafted upon the *Rhododéndron pónticum*, all of which are in fine growth.

Leaving the hot-house, you enter the camellia apartment, a double house, facing south and north, one hundred feet in length. Among the camellias, either in bloom or displaying buds, we noticed the following rare sorts:—*Camellia japonica* var. *Smithii*, *Sieboldii*, *Prattii*, *Gilesii*, *triumphans*, *Campbellii*, *Fordii*, *mutabilis*, *philadelphica*, *Palmer's Perfection*, *William IV.*, *nobilissima*, *tricolor*, *E'stheri*, *delicatissima*, *péndula*, *Kingii*, *Milleri*, *candidissima*, *amabile*, *francosurtensis*, *ochroleuca*, the King of the Netherlands, and *Fløyi*, all in the highest state of perfection. Among the older sorts, the *álba pleno*, *Chándleri*, *élegans*, *speciosa*, *flavescens*, *variegata*, *Pæoniæflora*, &c., were completely covered with blooms. In the centre of the house stands a noble plant of the double white, about twelve feet high from the earth; the trunk measures, three feet from the earth, nine inches in circumference: it is a perfectly shaped plant, branched to the ground, and at least thirty-six feet in circumference. In the western part of the house stands the original plant of the splendid camellia *Sherwoodii*, a superb formed variety, shape of double white, of a deep rose, finely flaked with white, and perfectly imbricated; this was raised by Mr. Sherwood. Several distinct and fine seedlings were also in bloom, none of which are yet named: the petals of one beautiful rose-colored sort were the most perfect I ever saw, perfectly round, with the flower regularly arranged, of a perfect form, imbricated, and extremely large, the petals being full two inches in width; the flower would entirely cover a common sized saucer.

Associated with the camellias, the daphnes, *índica* and *Daphnii* perfumed the whole house. Some fine rhododendrons were also in bud, among which were the true *arborea*, *Kellyana*, *Russelliana*, *álta clerénse*, *cinnamómeum*, &c., and some fine oranges and lemons. I also noticed the singularly fruited lemon imported by Girard, shaped like a hand; Mandarin orange, St. Helena lemons, &c.

Passing from the camellias, you enter the green-house, on the north-east side. It is a double pitched building, sixty-two feet in length, and thirty-eight feet wide. The front stage is occupied by upwards of four thousand seedling azaleas, two thirds of which will bloom the present season, all hybrids, raised from every variety of Indian azalea in cultivation. A few are deciduous, while others are covered with foliage of distinct character, and, in many instances, of very peculiar

habit. The greatest care was taken in the hybridization of the plants from which they were produced, and in the cultivation of the seedlings, and we may promise the florist and amateur, the coming season, a collection of new azaleas far surpassing in beauty any of the older sorts. The rest of the house is filled with plants of verbenas, *Primula sinensis*, roses, &c. We noticed a fine seedling rose, *Rosa Sherwoodii*, a hybrid variety, equal in shape and size to, and as compact as, the common Garden Cabbage, but of an entirely distinct color, being as perfect and brilliant a scarlet as the *Verbena Melindres*. Small plants are now for sale at five dollars each, and we heartily commend it to florists as the most important addition to this beautiful tribe, ever produced.

Another portion of the house is entirely filled with fine *Cacti*, the *Epiphyllum nobilissima*, *alatum*, and *Russellianum*, a fine new sort called the May-fly; *Cerei*, *Echinocacti*, *Mammillariæ*, &c. At the end of this house, you enter a small propagating house, thirty-eight feet long, filled with camellia cuttings, principally of the best double sorts, *Orchidæ* of various sorts; the *Cattleya Forbesii* was just coming into bloom, and the superb *Rondeletia speciosa* just displaying its corymbs of superb scarlet flowers.

Leaving the propagating house, you enter the south-western side. Among the plants in bloom were the *E'pacris grandiflora*, *palludosa*, and *heteronema*, *Corræa speciosa* and *pulchella*, *Cyclamen coum*, *Oxalis flava*, *versicolor* and *floribunda alba*, *Phlox Drummondii*, *Polygala cordata*, and *myrtifolia*, *Acacia microphylla*, *Beaufortia decussata*, *Lechea naltia formosa*, *Dillwynia cinerascens*, *Kennedyia prostrata*, the beautiful purple *Hovea pannosa*, *Saxifraga ligulata* or shrubby saxifrage, *Daviesia myrtifolia*, *Viburnum rugosum*, and a fine collection of several thousand pelargonias and roses of the choicest kinds. I also noticed two fine large plants of the *Pæonia arborea*, (*Moutan*.) and *papaveracea*, both of which were completely covered with flower buds.

Philadelphia, Feb. 22, 1841.

The collections of Messrs. Sherwood and Mackenzie have been noticed by us in our past volumes, the former in our III., p. 308, and the latter in our V., p. 369; but it will be seen, by a reference to our remarks, that they have made great additions to their establishments, particularly in the number of seedling camellias, azaleas, &c.

ART. III. *Notice of some Plants found in this vicinity,*
By JOHN LEWIS RUSSELL, Prof. of Botany to the Massachusetts Horticultural Society, &c.

Lolium temulentum L.—An annual grass, of two feet in height, flowering in July. In a rye field on the farm of Horace Ware, Marblehead. Beck's *Botany of Northern and Middle States*, p. 417; Burnet's *Outlines*, &c., p. 364; fig. Torrey's *Compendium*, p. 65. (Not noticed in Bigelow's third edition of *Plants of Boston*, nor in the *Catalogue of Plants of Massachusetts*.)

Habenaria (Orchis tridentata) Hooker. Beck. *Darlington's Flora*, &c.

Syn. *Orchis clavellata*. Elliott's *Sketches*, &c.

A small, greenish flowered orchis, flowering in July and August. Found in a sphagnum swamp in Chelmsford, but rare. (Not described in *Florula Bostoniensis*, third edition.)

Salix pedicellaris Ph., *Salix vitellina* L., *Salix prinoides* Ph., growing together in a meadow, on the farm of Josiah Fletcher, Chelmsford.

Schwalbea americana Willd. Specimens presented, one from Hubbardston, Worcester Co., where it is abundant on sandy fields.

Ophioglossum vulgatum L. Several specimens of this curious little fern were found last summer, in Hingham, by Mr. Leras, of that town, and subsequently by myself, in another locality, four miles distant. (Not in *Fl. Bostoniensis*, third edition.)

Conferva flavescens? Roth. Common in ditches. March. Chelmsford. A most elegant aquatic plant, of the confervales.

Najas canadensis Mx. In ditches of peat meadows. Chelmsford.

Euchroma coccinea Nutt., syn. *Bartsia coccinea* L. Very common in meadows in Chelmsford.

A beautiful yellow variety was frequently exhibited at the flower exhibitions of the Middlesex Horticultural Society, at Lowell, last spring, by Charles Brazer, being the *Bartsia coccinea* var. *pallens* of Pursh. In this variety, the bractes were of a bright sulphur yellow, instead of scarlet, the foliage

of a paler green, and the plant small. Tewkesbury and Dracut.

Gentiana Pneumonanthe L. A beautiful species, somewhat like *Gentiana saponaria*, but more slender and delicate. Hubbardston.

Fragaria vesca L. Observed at Dennysville, Me. by Mr. Thomas Lincoln.

J. L. R.

Chelmsford, March, 1840.

ART. IV. *On the destruction of the Red Spider.*

By J. W. RUSSELL.

A CERTAIN remedy for the vile insect, known by the name of *Red Spider*, no matter whether it has made its appearance on the grape vine, peach tree, or any other tree or plant that is grown under *glass*: sulphur, will destroy them, used in the following manner:—After syringing the trees or plants with water, as thoroughly as it is possible so to do, in the evening, when the sun is leaving the glass, fill half a dozen saucers or more, (according to the size of the house,) with sulphur, and place them on the top of the flues, or pipes, if flues are not used, ten feet apart, and start the fires; the heat of the flues or pipes will heat the sulphur, and the vapor will rise and fill the house completely full, so much so that in the morning you will smell it quite strong, when you enter the house: by following up this method a week or ten days, the red spider will make its exit. A dry heat is the red spider's element, and they make rapid progress if this is not counteracted by moisture and sulphur, which completely destroys them.

J. W. R.

Mount Auburn Cemetery, Feb. 1841.

We can attest to the certainty of Mr. Russell's plan for destroying the red spider, one of the most destructive insects which infests green-houses, hot-beds, and hot-houses;—sulphur and a plenty of moisture are the only things which have ever enabled us to get rid of this pest.—*Ed.*

ART. V. *Account of a new native variety of the Pear, called the Cross Pear, with a description of the fruit, its origin, &c.* By the EDITOR.

NOTWITHSTANDING the list of native American pears is tolerably extensive, and embraces some of the most excellent fruits cultivated in our gardens, yet the production of new varieties, which are really deserving of cultivation, is rare, and the accessions to the list, for the last few years, have been quite limited. Ten or twelve years ago, many of those which are now so highly esteemed, were first publicly brought into notice, and they have continued to afford the highest satisfaction to lovers of good fruit.

As we have before remarked, nearly or quite all the American fruits, particularly pears, which have been brought into cultivation, have been the result of accident. The trees have been found growing in pastures, fields, or neglected gardens, where they have sprung up from the soil, arrived to a bearing state, and continued to produce fruit, in some instances, for years before their merits have been discovered and made known. An instance of this may be noticed in the Cushing, Seckel, and others, now celebrated varieties, which are indispensable additions to every good collection of fruits. The same may be remarked of the variety we are about to notice, as will be seen in the course of our observations. These accidental productions, without the aid or assistance of man, show how far his experiments in the growth of new varieties may be successful, when conducted on physiological principles, as practised by Dr. Van Mons and other celebrated German and French pomologists.

The Cross pear first attracted our notice the past fall, at the Massachusetts Horticultural Society's rooms, where we had an opportunity of tasting the fruit exhibited, which we found to be of excellent quality. A short time subsequent to this, we were kindly presented with two very fine specimens by E. S. Rand, Esq., of Boston, who received them from his father's garden in Newburyport, where the variety is said to have originated. From the specimens presented to us, we made a drawing, and also a description of the variety, in order to enable us to lay before our readers a full account of the pear. Subsequently to receiving the specimens of pears, we

inquired of Mr. Manning his opinion of this variety, and he remarked, without hesitation, that it was a most excellent fruit.

Desirous of obtaining some account of the origin and history of the original tree, more particularly with a view to ascertain its native production, we wrote to E. S. Rand, Esq., of Newburyport, in whose garden the tree stands from which the pears we received were gathered, upon the subject, with a request that he would inform us respecting its American origin, &c. To his kindness in promptly and fully answering our queries, our readers are indebted for the following account of this variety.

Some years ago, a friend of Mr. Rand's presented him, in the autumn, with a pear, which, he said, grew on a tree in the garden of a Mr. Cross, in Newburyport. Its history, he informed Mr. Rand, was this:—Mr. Cross, purchasing a piece of land adjoining his estate, found on it a natural pear tree, as he supposed: presuming the fruit to be worthless, he cut off all the branches but one, for the purpose of changing the fruit and removing the tree into his garden: the branch left produced what is now called the Cross pear.

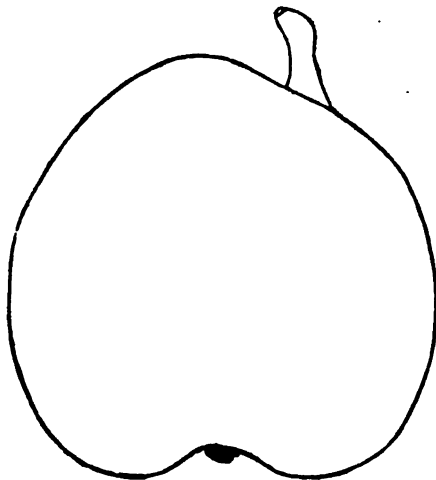
Mr. Rand procured a scion, the spring following, and he has now a tree, which produced, the last season, about a bushel of pears. It has borne abundantly and constantly, and the fruit is now larger and fairer than when it first commenced bearing. Mr. Rand has had them, some years, in eating in February, but generally, they are in perfection in December, and sometimes earlier, as was the case last season. The skin, when taken from the tree the latter part of October, is green, and when fully ripe, of a light yellow. As near as Mr. Rand can recollect, (not having kept any record,) his tree, he thinks, is thirteen to fifteen years old, and has been in bearing eight or ten years.

To this account we add the annexed drawing, (*fig. 8.*) and description of the fruit.

CROSS PEAR.—*Fruit*, medium size, roundish, two and a half inches in length, and two and a quarter inches in diameter. *Stalk*, three quarters of an inch long, and very thick, inserted in a slight cavity. *Eye*, small, and considerably depressed. *Skin*, smooth, deep yellow, red on the sunny side, very russety around the eye, and covered all over with russety dots, and sprinkled with small black spots. *Flesh*, melting, juicy, and sweet, with a perfumed and agreeable fla-

vor. In eating in December, sometimes earlier, (in November,) and occasionally keeping till February.

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The beauty of this pear, (somewhat resembling a St. Michael, when in full perfection,) together with its abundant and constant bearing, and its melting flesh and perfumed flavor, render it a desirable variety in collections, and one which will rank with the Cushing, Seckel, and others of our finest American kinds.



ART. VI. *Notices of Culinary Vegetables, new, or recently introduced, worthy of general cultivation in Private Gardens, or for the Market.* By the EDITOR.

THE concluding remarks in our last number were upon the potato, of which we noticed one or two kinds. We also offered a few observations relative to the Rohan, the merits of which still remains a mooted question among many cultivators. Since our remarks were written, we have noticed in

the *Cultivator*, as well as some other agricultural journals, several communications upon the Rohan potato, and all agree, to the number of eight or ten individuals, some of whom have raised them five years, that, so far as regards their productiveness, they are fully equal to all that has been stated about them, and far excel any of our common varieties in their remarkable yield. One correspondent raised one hundred and ninety bushels from two bushels, another, two hundred bushels from two and a half bushels, some of the potatoes weighing five pounds each.

Mr. J. A. Thompson, of Catskill, who was one of the first to introduce them, states, that if they are properly cultivated—the potatoes planted about the 20th of May, and allowed to remain in the ground till very late in the autumn, even after the tops have been killed by frost, and when dug, taken to a cellar, or some other place, where they can be covered with sand or even grass, that they will fully answer the expectations of any cultivator. When there have been fair opportunities to test the Rohan in comparison with others, “the result has been most decidedly in its favor, over all other varieties compared with it.” It keeps well, and Mr. Thompson observes that he has eaten them the “last of June, as solid and firm as in January.” We have seen several of our friends since the period we have referred to, and they, with scarcely an exception, give it as their opinion, that the Rohan is not only the most productive variety they ever raised, but is equally as good, and in many instances better, than any of our common sorts. We therefore hope that it will have a fair trial the present year, when its value can be as definitely settled as that of any of the older varieties.

RHUBARB.—The cultivation of rhubarb is yearly extending, and it has become so indispensable an article for tarts, in the early part of the season, that immense quantities are now sold in our markets; it therefore is somewhat of an object with all individuals who cultivate the plant, particularly with those who grow for the market, to secure the earliest and best kinds, as it is in the early part of the season, when it is yet scarce, that it commands a price which affords a handsome profit to the cultivator.

The Tobolsk rhubarb.—In our IV., p. 88, we described at length the qualities of this new and celebrated variety. Since then, we have not only had occasion to notice considerable that has been said in favor of it, but have had

the opportunity to try it ourselves, though as yet not long enough to state any thing with certainty as to its comparative value: another year we may be better able to do this. We notice it now, more particularly to offer a few observations upon the cultivation of this variety from seed.

Like all new productions, it has been somewhat sought after, and, in consequence, the seeds have been procured, with the intention of securing the variety in this manner, at a cheaper rate, and in greater quantity. We fear, however, that all who have purchased seeds will not find that they possess the *true* Tobolsk rhubarb; for it differs, when raised from the seed, as much as any other vegetable which is of hybrid origin. No dependance can be placed upon its genuineness, when raised in this manner, as we have ourselves ascertained, having raised it from seed, and also having it in our possession grown from imported roots. Among the seedlings, there were scarcely two plants alike: perhaps some of them, which very nearly resemble the parent in appearance, may be a great way removed from it, in the peculiar merits which are attributed to the original variety, and which render it so valuable a kind. The only certainty of having it true, is to secure roots which have been propagated and descended from the parent plant by separation.

Myatt's new Victoria.—This new variety, said to grow to a very great size, has been imported, and is in the possession of several amateur cultivators, but it has not yet been planted long enough to ascertain its merits, as compared with our old sorts. We shall notice it again, when it has been fairly tested.

PEAS.—Very few new peas, we believe, have been brought into notice within the few last years. Some varieties, which were new and untried, at the time of our first reports, in our Vol. III., have since been ascertained to be excellent kinds, and great additions to the garden: of these, we may again mention the names.

Early Warwick.—As early as the Early Frame, a very hardy variety, and a great bearer, all of which qualities have been tested by ourselves, and some of our friends. It is now becoming more extensively planted, and we do not doubt, will, ere long, take the place of the old early kinds.

Early Cedo Nulli.—Another remarkably early variety, ripening a crop about the first of June. It is a good bearer, and a tolerably prolific variety, and well worthy of cultivation as one of the very earliest.

The d'Auvergne pea.—A French variety, noticed in our III., p. 19, since which period we are not aware that we have read any thing respecting it. It has been imported the present spring. Our friends will have the opportunity to test its qualities, which are said to be very superior, as will be seen by a reference to the page noted above.

Bishop's Dwarf pea is a fine variety, not near so extensively cultivated as its merits deserve. It is early, coming in after the Early Washington, between that and the blue Imperial, and from its dwarf and compact habit, not growing over eighteen inches, forms quite an ornament in the kitchen garden. The pod is large and well filled, and the pea equal in quality to any of the early kinds. The peas should be very thinly planted, as, from the branching habit of this variety, each plant requires considerable room.

The old *blue Imperial* is the standard variety for cultivation, and it is so well liked, and is so excellent a sort, that it will be difficult to displace it by new varieties.

The Victoria, Pitt's Early Prolific, and some others, have been mentioned in the London seedsmen's catalogues, as new and fine kinds. We shall give them a trial, and report how well they have succeeded another year.

The Milford new Marrowfat pea is the name of a new variety, which has been brought into notice the present season. It grows to the height of four feet, is very large, and a great bearer, boils a beautiful green color, and is said to be quite equal to Knight's Marrow. The grower of this new pea appeals to several gentlemen who have given it a fair trial, and who severally state that it is of first rate excellence, highly approved, and a remarkably fine flavored pea. It is now for the first time offered for sale by Mr. Young, of the Milford nursery, near London, at two shillings, (about fifty cents,) per quart.

BEANS.—We have no new varieties to mention at this time, none, that we are aware of, having been produced.

The Soissons bean.—It will be recollected that we noticed this variety in our III., p. 20. Since that period, we have annually cultivated it, and have found it to be a valuable variety, ripening early in cold seasons, and possessing excellent qualities for cooking. It is a kind which should always be planted with the Lima and Sieva, as a crop can be depended upon with certainty, when the latter often fail.

SPINACH.—This vegetable, which is cultivated so exten-

sively in England, and of which immense quantities are raised to supply the market, is yet only grown to a very limited extent by our cultivators and market gardeners: it is, however, gradually coming more into use, and, within a year or two, the demand for it has considerably increased. In an article grown so largely as the spinach, it would have been supposed, that if the varieties could have been improved to any degree, the attempt would have been made by the more skilful English gardeners, who are ever making exertions to originate new and superior things. But, for a great length of time, with a single exception, the only kinds cultivated have been the common Round or Summer spinach, and the Prickly or Winter spinach.

A few years since, a newly introduced species, called the New Zealand spinach, attracted considerable attention, was noticed in the agricultural papers, and was grown to some extent for a year or two, but as soon as it lost its novelty, its cultivation was nearly abandoned, and the old standard kinds which were set aside, were again reinstated.

It has consequently been left to some of our own practical gardeners to enhance the value of this vegetable, by originating a new and superior variety: and though it may not seem to many, so important an occurrence to raise a new vegetable, as to raise a new fruit or flower, yet we believe that he who produces a superior new vegetable, confers a greater favor upon the public than the individual who produces a new fruit or flower. Vegetables are necessities which administer to the comfort of all, while fruits may be viewed, if not wholly, yet in a degree, as luxuries, which can be dispensed with.

Riley's new Burdock spinach.—This is said to be a very superior sort. It originated with, and has been grown only by, Mr. Riley, gardener to Pierce Butler, Esq., near Philadelphia: when properly cultivated, it resembles, in appearance, the Savoy, with the exception of the size, which is several times larger, and the quality far superior. The leaf is perfectly smooth, and the whole plant is quite hardy, standing out the severest winters without injury. It is a highly desirable sort. The seed should be sown in drills, on rich, well manured ground, and the plants thinned out to one foot apart: each plant is full the size of half a bushel, if properly cultivated. This variety has taken the prize every time it has been shown at the Pennsylvania Horticultural Society.

It will be noticed that this new variety possesses one most excellent quality, viz. its hardiness, which enables the plants to stand our severe and trying winter without danger. This alone will give it a high value, independent of its superior size, great product, and better quality. It must be considered a great acquisition.

ART. VII. *Successful treatment of Strumaria filifolia.*
By J. L. R.

BEING presented by a friend with a few very small bulbs of this little singular amaryllis, recent from the Cape of Good Hope, I was induced to institute some experiments to produce its inflorescence, which was unknown to me. This was in the spring of 1839. Planted in the open ground, they remained without showing any signs of growth until the autumn, when, just before the frost, they were carefully potted in rich mould and sand, and suffered to grow during the entire winter. Their singularly delicate and grass-like foliage hung over the pots to the extent of several inches, and, successively producing new leaves, they seemed likely to increase in vigor and strength. No other change was perceptible, until towards September of 1840, a spathe of deep purple color protruded rapidly from one, and shortly after another and larger appeared from a second. These were elevated on a peduncle of two inches length, and very delicate white stellate flowers, six or seven in number, each furnished with its stalk, expanded and remained so for several weeks. The flowers were each not much larger than those of a chickweed, (*Alsine media*;) their size, the crimson anthers and delicate color, served to constitute the plants, growing in a pot corresponding, quite an unique object. The seeds ripened in a short time, after which the bulbs were suffered to dry away for hybernation.

The *Strumariæ* are generally small bulbous Cape plants, rather objects of botanical interest than of floricultural attention. Pursuing similar experiments on *Brunsvigia falcata*, and *Cyrtanthus odoratus*, I hope, ere long, to be as successful.

J. L. R.

ART. VIII. *Floricultural and Botanical Notices of new Plants figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

Floricultural Intelligence.—*New Seedling Pelargoniums.* Mr. McLennan, gardener to W. Pratt, Esq., of Oakley Place, Watertown, has raised some fine seedling pelargoniums, or geraniums, which are now coming into full flower. A few of the plants have already opened their blossoms, which promise a rich reward to Mr. McLennan, for his exertions in attempting the growth of seedlings. The seeds were selected from the best of the old sorts, such as *Speculum mundi*, *Diomedea*, &c., the flowers of which were fertilized with others equally beautiful. Some plants, from seeds of the first named variety, have produced flowers nearly white, with a deep brown spot on the upper petals; the shape of the truss, and habit of the plant, excellent. Many others, (so we are informed by a good judge, not having had the opportunity to see them ourselves, though we intend to do so,) are equally novel and splendid, and show that perseverance and care are only wanting to increase the varieties of the pelargonium as rapidly, and with equal success, as has been done by the English florists. We intend to offer some observations upon the production of seedlings, in order to induce amateurs and others to make attempts to procure new varieties.—*Ed.*

Seedling Chrysanthemums.—There was a beautiful show of seedling chrysanthemums at the meeting of the Pennsylvania Horticultural Society, in November last. Mr. Kilvington and Mr. Buist both presented specimen plants. The

premium for the best six varieties of American seedlings was awarded to Mr. Buist. Honorable mention was made of two seedlings, a white and a pink one, presented by Mr. Kilvington. One of the seedlings raised by Mr. Buist, was called *Defiance*:—the flowers are of a pale lemon color, deepening to yellow in the centre, and very symmetrically formed. We are glad to see this neglected, and, in our opinion, most beautiful flower attracting the attention of the Philadelphia florists. The varieties may be undoubtedly greatly improved by the production of seedlings, and we hope that the same interest may be created among the amateurs of the vicinity of Boston, where the chrysanthemum has a greater claim upon our attention than at the south. In the green-house, conservatory, or parlor, in November and December, two of the most dreary months of the year, no flower contributes so much to the gayness of either situation, and we are only surprised that they are not cultivated and found in every collection.

Camellia japonica var. *ochroleuca*, has lately flowered in the collection of Mr. Wilder, and he informs us it is one of the finest additions which has lately been made to this beautiful family. The flower is white, with a straw-colored shade at the base of the petals, which gives to the whole flower a yellowish tinge; it is, however, far from being yellow, as has been described. The petals are large, and not numerous, but have a free habit, which gives the flower a bold and striking appearance. Mr. Wilder will continue his description of the camellias in our next number, and, among several new and fine varieties, the *ochroleuca* will be described at greater length.

The number of fine white and light-colored varieties of the camellia is very small, compared with the pink, rose, and darker kinds; and every fine flower of the former class should be viewed as valuable.

Seedling Amaryllises.—A large number of seedling amaryllises have been in flower, the past winter, at Mr. Cushing's. Most of the bulbs were raised from seed, by Mr. Haggerston, about four years ago, and many of them have now come into bloom for the first time: among them are several splendid varieties. The amaryllises are greatly neglected plants, and we could wish to see them attract the attention which they fully deserve, from their great beauty.

Seedling Calceolarias.—About fifty seedling plants, of this fine flower, will be in bloom in April and May, in the collection of Messrs. Hovey & Co.

REVIEWS.

ART. I. *The American Journal of Science and Arts.* Conducted by PROF. SILLIMAN and B. SILLIMAN, JR. Vol. XL. Quarterly. No. 1, for January, 1841. New Haven, 1841.

PROBABLY no periodical published in this country holds so conspicuous a rank as Prof. Silliman's *Journal of Science*. Under his charge, it has attained a position which is not surpassed by any similar publication in Europe. Its pages are filled with valuable articles upon every branch of science, and there is no discovery or improvement which escapes the notice of its able conductors. It must be considered not only as the organ of the scientific minds of this country, but as the source through which may be learned the advancement of science throughout the world. The tendency of the *Journal* has been to elevate the character of the United States as a scientific nation, and gives them a high standing abroad.

The *Journal* has now reached its fortieth volume, and though striving against many obstacles, and affording very little income to its conductors, it has continued to increase in the value and variety of its contents, and to sustain its high rank among scientific periodicals. Its pages contain subjects interesting to the agriculturist and horticulturist, as well as to the botanist and mineralogist. Indeed, there is no individual who feels any interest in scientific improvement, who will not find in its pages much satisfactory and pleasing information. A work so excellently conducted, should be sustained by all who feel any pride in seeing our country, young as it is, produce a scientific journal, not surpassed by any other in the world.

We have been led to a notice of the *Journal*, at this time, by the appearance, in its pages, of a long and highly interesting article by Dr. Gray, Prof. of Botany to the University of Michigan, upon the European herbaria, "more particularly those most interesting to the North American botanist." Dr. Gray, it will be recollected, visited Europe for the purpose of collecting material for the more complete publication of the *Flora of North America*, and also for selecting a library for the University of Michigan. Excellent facilities were ex-

tended to him to complete his researches, and the notices referred to are drawn up from an inspection of all the collections he has enumerated. As we believe Dr. Gray's remarks will be read with great pleasure by many of our readers, and not without some interest to all, we are induced to extract somewhat more largely than usual from a work not strictly practical.

Our brief notices, (Dr. Gray remarks,) will commence with the herbarium of the immortal Linnæus, the father of that system of nomenclature to which botany, no less than natural history in general, is so greatly indebted.

This collection, it is well known, after the death of the younger Linnæus, found its way to England, from whence it is not probable that it will ever be removed. The late Sir James Edward Smith, then a young medical student, and a botanist of much promise, was one morning informed by Sir Joseph Banks that the heirs of the younger Linnæus had just offered him the herbarium, with the other collections and library of the father, for the sum of one thousand guineas. Sir Joseph Banks, not being disposed to make the purchase, recommended it to Mr. Smith; the latter, it appears, immediately decided to risk the expectation of a moderate independence, and to secure, if possible, these treasures for himself and his country; and before the day closed, had actually written to Upsal, desiring a full catalogue of the collection, and offering to become the purchaser at the price fixed, in case it answered his expectations. His success, as soon appeared, was entirely owing to his promptitude, for other and very pressing applications were almost immediately made for the collection, but the upright Dr. Acrel, having given Mr. Smith the refusal, declined to entertain any other proposals while this negotiation was pending. The purchase was finally made for nine hundred guineas, excluding the separate herbarium of the younger Linnæus, collected before his father's death, and said to contain nothing that did not also exist in the original herbarium: this was assigned to Baron Alstrœmer, in satisfaction of a small debt. The ship which conveyed these treasures to London had scarcely sailed, when the king of Sweden, who had been absent in France, returned home, and despatched, it is said, an armed vessel in pursuit. This story, though mentioned in the Memoir and Correspondence of Sir J. E. Smith, and generally received, has, we believe, been recently controverted. However this may be, no doubt the king and the men of science in Sweden were greatly offended, as indeed they had reason to be, at the conduct of the executors, in allowing these collections to leave the country; but the disgrace should perhaps more justly fall upon the Swedish government itself, and the University of Upsal, which derived its reputation almost entirely from the name of Linnæus. It was, however, fortunate for science, that they were transferred from such a remote situation to the commercial metropolis of the world, where they are certainly more generally accessible. The late Professor Schultes, in a very amusing journal of a botanical visit to England, in the year 1824, laments indeed that they have fallen to the lot of the "*toto disjunctos orbe Britannos*;" yet a

journey even from Landshut to London may perhaps be more readily performed, than to Upsal.

After the death of Sir James Edward Smith, the herbarium and other collections, and library of Linnæus, as well as his own, were purchased by the Linnæan Society. The herbarium still occupies the cases which contained it at Upsal, and is scrupulously preserved in its original state, except that, for more effectual protection from the black and penetrating dust of London, it is divided into parcels of convenient size, which are closely wrapped in covers of strong paper lined with muslin. The genera and covers are numbered to correspond with a complete manuscript catalogue, and the collection, which is by no means large in comparison with modern herbaria, may be consulted with great facility.

In the negotiation with Smith, Dr. Acrel stated the number of species at eight thousand, which probably is not too low an estimate. The specimens, which are mostly small, but in excellent preservation, are attached to half sheets of very ordinary paper, of the foolscap size, (which is now considered too small,) and those of each genus covered by a double sheet, in the ordinary manner. The names are usually written upon the sheet itself, with a mark or abbreviation to indicate the source from which the specimen was derived. Thus, those from the Upsal garden are marked *H. U.*; those given by Kalm, *K.*; those received from Gronovius, *Gron.*; &c. The labels are all in the handwriting of Linnæus himself, except a few later ones by the son, and occasional notes by Smith, which are readily distinguished, and indeed are usually designated by his initials. By far the greater part of the North American plants which are found in the Linnæan herbarium, were received from Kalm, or raised from seeds collected by him. Under the patronage of the Swedish government, this enterprising pupil of Linnæus remained three years in this country, travelling throughout New York, New Jersey, Pennsylvania, and Lower Canada: hence his plants are almost exclusively those of the Northern States.

Governor Colden, to whom Kalm brought letters of introduction from Linnæus, was then well known as a botanist, by his correspondence with Peter Collinson and Gronovius, and also by his account of the plants growing around Coldenham, New York, which was sent to the latter, who transmitted it to Linnæus for publication in the *Acta Upsalensia*. At an early period he attempted a direct correspondence with Linnæus, but the ship by which his specimens and notes were sent was plundered by pirates; and in a letter sent by Kalm, on the return of the latter to Sweden, he informs Linnæus that this traveller had been such an industrious collector, as to leave him little hopes of being himself further useful. It is not probable therefore that Linnæus received any plants from Colden, nor does his herbarium afford any such indication. From Gronovius, Linnæus had received a very small number of Clayton's plants, previous to the publication of the *Species Plantarum*; but most of the species of the *Flora Virginica* were adopted or referred to other plants on the authority of the descriptions alone.

Linnæus had another American correspondent in Dr. John Mitchell, who lived several years in Virginia, where he collected extensively; but the ship in which he returned to England having been taken

by pirates, his own collections, as well as those of Governor Colden, were mostly destroyed. Linnæus, however, had previously received a few specimens, as, for instance, those on which *Proserpinaca*, *Polypremum*, *Galax*, and some other genera, were founded.

There were two other American botanists of this period, from whom Linnæus derived, either directly or indirectly, much information respecting the plants of this country, viz. John Bartram and Dr. Alexander Garden, of Charleston, S. C. The former collected seeds and living plants for Peter Collinson during more than twenty years, and even at that early day, extended his laborious researches from the frontiers of Canada to Southern Florida, and to the Mississippi. All his collections were sent to his patron Collinson, until the death of that amiable and simple-hearted man, in 1768; and by him many seeds, living plants, and interesting observations, were communicated to Linnæus, but few, if any, dried specimens. Dr. Garden, who was a native of Scotland, resided at Charleston, S. C., from about 1745 to the commencement of the American revolution, devoting all the time he could redeem from an extensive medical practice, to the zealous pursuit of botany and zoology. His chief correspondent was Ellis, at London, but through Ellis he commenced a correspondence with Linnæus; and to both he sent manuscript descriptions of new plants and animals, with many excellent critical observations. None of his specimens addressed to the latter, reached their destination, the ships by which they were sent having been intercepted by French cruisers; and Linnæus complained that he was often unable to make out many of Dr. Garden's genera, for want of the plants themselves. Ellis was sometimes more fortunate; but as he seems usually to have contented himself with the transmission of descriptions alone, we find no authentic specimens from Garden, in the Linnæan herbarium.

We have now probably mentioned all the North American correspondents of Linnæus; for Dr. Kuhn, who appears only to have brought him living specimens of the plant which bears his name, and Catesby, who shortly before his death sent a few living plants which his friend Lawson had collected in Carolina, can scarcely be reckoned among the number.

The Linnæan Society also possesses the proper herbarium of its founder and first president, Sir James E. Smith, which is a beautiful collection, and in excellent preservation. The specimens are attached to fine and strong paper, after the method now common in England. In North American botany, the chief contributors are Menzies, for the plants of California and the North West Coast; and Muhlenberg, Bigelow, Torrey, and Boott, for those of the United States. Here, also, we find the cryptogamic collections of Acharius, containing the authentic specimens described in his works on the Lichens, and the magnificent East Indian herbarium of Wallich, presented some years since by the East India Company.

The collection of the British Museum, embracing that of Sir Joseph Banks, is next noted, and as scarcely inferior in importance to the Linnæan herbarium itself. That of Sir Joseph Banks is probably one of the oldest, prepared in the

manner commonly adopted in England, of which it may serve as a specimen:—

The plants are glued fast to half sheets of very thick and firm white paper of excellent quality, (similar to that employed for merchants' ledgers, &c.,) all carefully cut to the same size, which is usually sixteen and a half inches by ten and three quarters, and the name of the species is written on the lower right-hand corner. All the species of a genus, if they be few in number, or any convenient subdivision of a larger genus, are enclosed in a whole sheet of the same quality, and labelled at the lower left-hand corner. These parcels, properly arranged, are preserved in cases or closets, with folding doors made to shut as closely as possible, being laid horizontally into compartments just wide enough to receive them, and of any convenient depth. In the Banksian herbarium, the shelves are also made to draw out like a case of drawers. This method is unrivalled for elegance, and the facility with which the specimens may be found and inspected, which, to a working botanist with a large collection, is a matter of the greatest consequence. The only objection is the expense, which becomes very considerable when paper worth at least ten dollars per ream is employed for the purpose, which is the case with the principal herbaria in England: but a cheaper paper, if it be only sufficiently thick and firm, will answer nearly as well.

The collection of Pursh is next noticed.

The collections of Pursh, which served as the basis of his *Flora America Septentrionalis*, are in the possession of Mr. Lambert, and form a part of his immense herbarium. These, with a few specimens brought by Lewis and Clark from Oregon and the Rocky Mountains, a set of Nuttall's collections on the Missouri, and also of Bradbury's, so far as they are extant, with a small number from Frazer, Lyon, &c., compose the most important portion of this herbarium, so far as North American botany is concerned. There is also a small Canadian collection made by Pursh, subsequently to the publication of his *Flora*, a considerable number of Menzies's plants, and other minor contributions. To the general botanist, probably the fine herbarium of Pallas, and the splendid collection of Ruiz and Pavon, (both acquired by Mr. Lambert at a great expense,) are of the highest interest; and they are by no means unimportant in their relations to North American botany, since the former comprises several species from the North West Coast, and numerous allied Siberian forms, while our Californian plants require, in some instances, to be compared with the Chilian and Peruvian plants of the latter.

Besides these herbaria, may be mentioned two others of more recent formation, which possess the highest interest to the American botanist: they are those of Prof. Lindley and Mr. Benthams. Each of them comprise complete sets of all the plants collected by the unfortunate Douglas in the Oregon Territory, California, and the Rocky Mountains. Mr. Benthams collection of *Labiata* is unequalled, as is also Prof. Lindley's splendid herbarium of orchidaceous plants. Prof.

Lindley uses paper eighteen and a half inches long by eleven and a half wide, though he remarks that it is rather large and expensive.

The herbarium of Sir William J. Hooker, at Glasgow, is not only the largest and most valuable collection in the world, in the possession of a private individual, but it also comprises the richest collection of North American plants in Europe. Here we find nearly complete sets of the plants collected in the Arctic voyages of discovery, the overland journeys of Franklin to the polar sea, the collections of Drummond and Douglas in the Rocky Mountains, Oregon, and California, as well as those of Prof. Scouler, Mr. Tolmie, Dr. Gairdner, and numerous officers of the Hudson's Bay Company, from almost every part of the vast territory embraced in their operations, from one side of the continent to the other. By an active and prolonged correspondence with nearly all the botanists and lovers of plants in the United States and Canada, as well as by the collections of travellers, this herbarium is rendered unusually rich in the botany of this country; while Drummond's Texan collections, and many contributions from Mr. Nuttall and others, very fully represent the flora of our southern and western confines. That these valuable materials have not been buried, nor suffered to accumulate to no purpose or advantage to science, the pages of the *Flora Boreali-Americana*, the *Botanical Magazine*, the *Botanical Miscellany*, the *Journal of Botany*, the *Icones Plantarum*, and other works of this industrious botanist, abundantly testify; and no single herbarium will afford the student of North American botany such extensive aid as that of Sir William Hooker.

The great botanical collection of the *Jardine des Plantes*, which is probably the largest in the world, is next mentioned. The herbaria occupy a large room, eighty feet long and thirty wide.

The other collections are those of De Candolle at Geneva, surpassed by few in size and by none in importance; the Royal Bavarian herbarium at Munich, mostly Brazilian plants; the herbarium of the late Prof. Sprengel, comprising many North American plants; the Royal Prussian herbarium, at Schöneburg; and one or two private ones at Berlin. The whole article is highly interesting.

With the commencement of the present volume of the *Journal*, of which the number for January is the first, the editors give notice that they will furnish the numbers to all their subscribers, free of postage. This will be quite an item of saving, and will, we hope, be an inducement for individuals to give it their support. From a notice attached to this number, we extract the following, in relation to this subject, and commend it to the attention of all who are desirous of reading a scientific periodical:—

The editors of this Journal wish to call public attention to the fact, that they will, hereafter, on the conditions stated below, frank the numbers to all of their subscribers who receive the work *directly from them by mail*. Their object, in making this offer, is to place those persons who are so situated that they cannot take the work through an agent, and therefore free of charge of transportation, on the same footing, in this respect, with city subscribers. Subscribers by mail have heretofore paid from \$1.00 to \$1.37½ per annum for postage, which has been a sufficient consideration to induce many to decline taking the work. Now that this objection is removed, upon the simple condition of punctual remittances, the editors confidently hope that the number of their mail subscribers will be much increased; and they make no apology to their present supporters and contributors, for asking their assistance in aiding them to sustain this experiment, by making this notice more public, and by inducing their friends to subscribe.

The American Journal of Science and Arts is published at New Haven, Connecticut. Each number contains at least two hundred pages, closely and handsomely printed on good paper, and fully illustrated by engravings. The subscription is \$6.00 *in advance*, by mail. The extra dollar beyond the usual price of the literary quarterlies is indispensable, on account of a more limited patronage, and the great expense of engravings.

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

Changing the Color of white Hyacinths.—Dr. Liebig, in his *Organic Chemistry* applied to agriculture, soon to be presented to the American reader, with notes by Dr. Webster, of Cambridge, as announced in our last number, states that the color of a white hyacinth may be changed, for a short period, to a pale red hue, by simply sprinkling the soil with the juice of the *Phytolacca decandra*, (common poke-root or poke-berry.) In one or two hours after, the flowers will assume a red color, which the influence of sunshine will cause to become gradually white again in a few days. The juice is taken up by the roots, and such parts, if any, of its elements as are nutritious are taken up, and the remainder excreted. When the work of Dr. Liebig appears, we shall take an early opportunity to review it at some length, as it is undoubtedly one of the most important additions to vegetable physiology that has ever been made.—*Ed.*

Respiration of Plants.—M. Colin has read before the Academy of Sciences a memoir on the respiration of plants, the experiments detailed in which were performed with M. Edwards, Sen.

Scarcely any of the phenomena of the respiration of plants have been hitherto recognized, except the disengagement of carbonic acid gas: and this has been explained by the combination of the oxygen of the air with the carbon of the grain. Thus, according to this theory, the grain is only acted upon by the atmosphere, and the action of water on the respiration of plants is not to be considered. In the respiration of leaves, carbonic acid is evolved during the night, and during the day is absorbed, and oxygen is disengaged by the direct solar rays: and these facts are explained by the supposition that the carbonic acid absorbed is decomposed by the plant, its carbon appropriated, and the oxygen disengaged. But this explanation supposes the plant to possess a decomposing power, which to MM. Edwards and Colin, it seems difficult to admit; and they have, in consequence, resumed the examination of this function of plants.

Hitherto, the experiments performed on the respiration of grain, have always been performed in the air; or when they have been performed in water, the explanation of the phenomena have been limited by what occurs in the air: what has been disengaged in the fluid has not been examined; but this has been done by MM. Edwards and Colin.

They took a globe with a straight neck, the capacity of which was from three to four litres of water, (about one hundred and eighty-three to two hundred and forty-four cubic inches,) with which it was filled; and they then introduced forty large and perfect Windsor beans, (*fèves de marais*.) To the globe a bent tube was adapted, and which terminated in a jar, also filled with water. The beans were then in contact only with the water and the air which it contained, and which could not be removed on account of the mode in which the experiment was performed; and this is an important circumstance, and upon which the success of the experiment depends.

The first phenomena which appeared, was the disengagement of bubbles of air arising from the seeds; at the end of twenty-four hours the disengagement was considerable. At the expiration of four days, the beans were weighed; they had increased twenty per cent. in weight. When put into the ground, they came up perfectly, which proves that they had suffered no change. As to the production of gas, that which was disengaged, after passing through the water and being received in the tube or jar, was only a sign of the function: it could be only that portion which the water did not dissolve as it was gradually formed; it was therefore smaller in quantity than that which was dissolved. The quantity of air which had passed through the water without being dissolved, amounted to from twenty to forty millimetres, (1—22 to 2—44 cubic inches,) but that which was dissolved in the water, and which was expelled from it by ebullition, was very considerable. Before this experiment, the water in the globe contained about 4—577 cubic inches of air, and after the experiment, more than 30—5 cubic inches of gas were expelled. Thus the action of the beans alone produced nearly thirty cubic inches of gas. No doubt, therefore, can exist, as to the action of water in the respiration of the beans.

It was found that the gas generated consisted of, first, an enormous quantity of carbonic acid; secondly, an almost infinitely small portion of oxygen; and thirdly, a very small quantity of a gas which

appeared to be azotic, of, at any rate, the authors at present so consider it; its proportion was rather smaller than that of the air contained in the water.

These experiments, then, prove that during the respiration of plants, water is decomposed, and that the carbonic acid formed is derived from the oxygen of the water, which unites with the carbon of the grain. MM. Edwards and Colin propose to examine, on a future occasion, whether carbonic acid thus formed, is totally or partially disengaged, and whether the hydrogen of the water is absorbed by the grain.—(*L' Institute*, No. 257, as quoted in *Phil. Mag.*, and the *Gard. Mag.*, Vol. XVI., p. 181.)

Propagating plants in Charcoal.—A new method of increasing plants, by cuttings inserted in charcoal, has been practised with considerable success in the Royal Botanic Gardens of Munich. The experiments, so far as they have been made, are of the most satisfactory description, and leave little doubt that this new discovery will lead to important benefits to the cultivator of rare plants. The article of M. Lucas, who discovered this method, by mere accident, appears in the *Gardener's Magazine*, translated from the German.

We have not room, under this head, to notice at proper length the details connected with the experiment made by M. Lucas. As yet, his experiments must be considered as very imperfect, but as the results have been remarkable, he was induced to communicate, for the information of all cultivators, the success which accompanied his first attempts.

After detailing the method of preparing the charcoal and the cuttings, he proceeds to name the number of plants which he has succeeded in rooting by the process, and among them we notice some which have been generally considered as difficult to increase, and which, under M. Lucas's new plan, rooted in from eight to fourteen days: others from fourteen days to three weeks: some from three to four weeks; and others in four to six weeks.

We shall take an early opportunity to lay the substance of M. Lucas's experiment before our readers, as we are certain that the discovery of this new plan will lead to important results. Many plants which it has been found very difficult to propagate, may be readily increased by the means of charcoal dust, and in a period much shorter than it has been supposed could be accomplished.—*Ed.*

Preservation and Staining of Wood.—At the Academy of Arts and Sciences, Paris, at the sitting of Nov. 30, 1840, M. Dumas, in the name of a commission composed of MM. Arago, De Mirbel, Sambey, Audouin, Boussingault, and himself, made a report on a memoir of M. Boucherie. The following is in the very words of this commission:—

M. Boucherie has endeavored to render wood much more durable, to preserve its elasticity, to prevent the variations in bulk which it undergoes from drought and moisture, to diminish its combustibility, to increase its tenacity and its hardness, and, lastly, to give it various durable colors, and even smells. To say that these endeavors have been fulfilled by new and simple methods, by no means expensive, and by the aid of common substances, at a very low cost, is sufficient to characterize the importance of the author's labors.

To imbue an entire tree with conservative, coloring, or other sub-

stances, the author has recourse to no complicated or expensive mechanical means: he takes advantage of all the absorbing force, (force aspiratrice,) of the vegetable itself, and that is sufficient to transport from the base of the trunk to the leaves, all the liquids that are intended to be introduced, provided they are kept within certain limits of concentration. Thus, if a tree in full sap is cut at the base, and plunged in a tub containing the liquor it is meant to absorb, it will ascend, in a few days, to the highest leaves, and all the vegetable tissue will be imbued, except the heart of the tree, which, from its hard nature, particularly in old stems, always resists penetration. It is not even necessary that a tree should have its branches and all its leaves; a few reserved at the top are sufficient for the purpose.

It is not necessary to have the tree standing, which would often render the operation impracticable: it may be cut down, and after having all the useless branches lopped off, and its base then put in contact with the liquid to be absorbed, which penetrates, as usual, into all its parts. Indeed, it is not ever necessary to cut down the tree; for a cavity made in the trunk, or the greater part of the surface dented with a saw, is sufficient, by putting those parts in contact with the liquid, to cause a rapid and complete absorption of it.

If M. Boucherie has resolved the grand problem he proposed, in a simple and practical manner, he has shown no less sagacity in the choice of the substances he has adopted to answer the purposes mentioned above. When the durability and hardness of wood are to be increased, and dry rot or moist decay avoided, he introduces into the tissue pyrolignite of rough iron, (*fer brut*.) This substance is well chosen, for crude (*brut*) pyroligneous acid is produced in all forests, by the making of charcoal; it is easy to transform this into pyrolignite of iron, by putting it in contact, when cold, even with old iron, and the liquid thus prepared contains much kreosote, a substance which, independent of the salt of iron itself, has the property of hardening wood and of preventing rottenness, as well as the ravages of insects, in timber used for building. Authenticated experiments, made in the cellars of Bordeaux, on hoops prepared by the author, have yielded the most irrefragable proofs of the great durability of the wood prepared by his plan. Ordinary hoops were reduced to powder at the least effort, while his were as solid as at the first.

When the warping of timber, (*jeu des bois*,) preserving its elasticity, and rendering it less combustible, are considered, the author finds a cheap preservative in the use of earthy chlorides, (*chlorures terreux*.) Impressed with the idea that his plans are soon to come into universal operation, he has not been satisfied with merely using chlorine of calcium, (*chlorure de calcium*.) which costs so little, but has tried the efficacious water of the salt marshes, which costs nothing, and found it to contain all the requisite qualities. Timber prepared by these saline solutions preserves its flexibility after several years' exposure to the air: when cut into thin slices, (*feuilles*,) they may be twisted spirally, and retwisted in a contrary direction, without cracking. When exposed to the air, it never either warps or splits, however dry it may be: and it does not burn, or, at least, with so much difficulty, that it is incapable of extending the ravages of a fire.

To these great and useful properties, which will be appreciated and applied in the navy, and in civil and domestic buildings, the author has added other applications, which, without having the same utility, hold out new materials and means for the arts. He colors timber with shades so various and so curiously marked, that the commonest wood may be used with much effect, for inlaying. The pyrolignite of iron only, gives a brown tint, which harmonizes well with the natural color of the parts of the wood which are too close for the pyrolignite to penetrate.

By introducing a tanning matter, after the pyrolignite ink is produced in the body of the wood, it is thus tinted either blue or gray.

By making the wood absorb pyrolignite of iron, and then prussate of potashes, Prussian blue is produced.

By introducing, successively, acetate of lead and chromate of potashes, yellow chromate of lead is formed.

By introducing into the same trunk, pyrolignite of iron, prussate, acetate of lead, and chromate of potashes, shades of blue, green, yellow, and brown are produced, which have the most varied effects.

These compositions, capable of causing so many different colors, may be varied *ad infinitum*: the application depends on the taste of the operator. Chemistry is sufficiently rich in reactions of this kind, to satisfy the most extravagant wants and caprices.

The author, M. Boucherie, has bestowed great labor and long reflection upon the subject, and his results have not been found by chance. The Commission state that the ideas and opinions he sets forth, are supported by facts previously known, and those which he has made public. The subject is considered as one of much importance, and they voted that M. Boucherie's memoir should be placed in the collection of works by foreign *savans*, and that a copy be transmitted to the ministers of Agriculture and Commerce, of Public Works, of the Marine, Finance, and War.—(*Gard. Mag.*)

ART. II. Domestic Notices.

Forest Trees of Massachusetts.—Rev. G. B. Emerson, of Boston, who has been employed by the Commonwealth to make a report upon the forest trees of the State, delivered an address upon the subject, at the last agricultural meeting of the season, held at the State House, on Thursday, March 18th. Mr. Emerson has, for a long period, been interested in the subject, and for more than twenty years has made the forest trees of the State his study. As a source of recreation and pleasure, as well as for the benefit of exercise and consequent health, he has visited our extensive forests, and examined and made himself familiar with all our fine trees and shrubs. The substance of his long experience and attention to the subject, will probably be given in a report, which will be published at the expense of the State.

The remarks of Mr. Emerson, from what we have noticed in some of the papers, not having been able to be present ourselves, we judge were in anticipation of his report, and were probably some of the more prominent facts which he has collected in his researches upon the subject. Mr. Emerson spoke of the destruction and rapid decay of our forests, and hoped that the time was not far distant, when attention would be attracted to this important subject, and we should find extensive plantations springing up to take the place of those which had long since yielded to the woodman's axe. He spoke of the trees of Great Britain, in comparison with those of our own State, from which it appeared that Massachusetts alone was far richer in her timber productions, than the whole of Great Britain. He presented a variety of statistical facts to show this, and read from a table which enumerated all the maples, oaks, ashes, &c. of Massachusetts. From this table, it appears, that all our *tall timber trees* amount to fifty-six, while those of England, which are *natives*, only number twenty-seven. We should be pleased to receive a copy of the table which Mr. Emerson presented to the meeting, and offer the same to our readers.

Mr. Emerson then alluded to the importance of improving our, what are termed by so many, *unimprovable lands*. He does not believe that of the great number of acres, (more than three hundred and fifty thousand,) which come under this denomination, all are unimprovable. Among the great number of trees, some are suited to every kind of soil and aspect. He repudiated the idea of there being absolutely barren sands. The pitch pine would flourish on the sandy plains, while the larch would be fitted to the rocky and mountainous districts; as an instance of this, he referred to the experiments of the Duke of Athol, already noticed in our pages, (Vol. V., p. 83.) On lower grounds which have a tendency to moisture, the white or Weymouth pine would rear its lofty and noble form.

Of the uses of forests he also spoke at some length. The value of trees, as furnishing a vast quantity of material for furniture, are already well known. For the purpose of fuel, our trees are worth to the Commonwealth the immense sum of \$5,000,000 annually. Forests are also useful as furnishing shade and shelter—as conductors of electricity from the clouds to the earth, giving fertility to the soil—as affording protection from the force of the wind, which would otherwise sweep over vast plains, carrying with them destruction and desolation—and are yet more useful as contributing, from the annual deposits of leaves, &c., to the fertility of the soil.

When the report appears, we shall take an early opportunity to give a synopsis of the subject.—*Ed.*

Plants in glass cases.—Having noticed, in some one of your numbers, that this neat and elegant mode of cultivating plants is being regarded with a favorable eye, I would just say, for the benefit of those interested in some of the more uncommon objects of cultivation, that I have no doubt of its success with many plants which cannot be raised by any other mode. We have had growing on our mantel, winter and summer, a group of the walking fern, (*Asplenium rhizophyllum*,) which has produced successive growths of leaves, young plants, and even fructification, confined in a common glass jar, and remaining, with scarcely any addition of water, for

the space of more than two years. We have also noticed, with frequent pleasure, a considerable collection of several beautiful exotic species, cultivated in a glazed case, and constituting not only an attractive object, but the easy means of watching the habits of these interesting, but neglected plants.—*J. L. R.*

Cultivation of Auriculas.—Mr. Editor:—Did we not once see a collection of seedling auriculas, of your raising, some of considerable merit? A treatise on *your own* mode of culture and treatment, from the sowing to the bloom, would be gratefully received, through the pages of your Magazine, by an admirer of those plants. We have English disquisitions in plenty, on this head, but we want something nearer home; so that others, like yourself, can perchance raise a good American variety.—*Yours, A True Yankee.*

Two Annuals not commonly seen in collections.—*Centauræa muricata* W., (*Loudon's Encyclopedia*, pl., p. 738.) Flowers rosy purple, neutral ray exterior, fine parted, two upper shorter; central florets, yellowish white, anthers bluish; peduncle very long channeled, furnished with an occasional bracte, simple, spiny like the calyx; leaves lyrate-pinnate, upper lanceolate toothed. July, August. Very pretty; slightly scented like *C. moschata*, for which its flower might be mistaken, being intermediate in form and size between that and the blue bottle, (*C. cyaneus*.) Native of Levant. In 1838, a seed of this rare plant was found in a box of raisins, and sown in an unfavorable situation, producing inferior flowers. From these, however, very large and fine plants were raised last summer, which were no mean addition to the flower border.

Scorpiurus sulcatus W., (*Loudon's Encyclopedia*, 10518.) A small, reddish-yellow flowering papilionaceous plant, with curious prickly and crooked pods; of a prostrate habit, and rather pretty. South of Europe. From seed found among raisins. This little plant may be ranked among those singular species of medicagos called snails, and the like, once cultivated as curiosities. From the structure of the seed-pod of this, the generic name is suggested, literally, a scorpion's tail.—*J. L. R., Chelmsford, 1841.*

Cultivation of Plants in rooms, particularly the Camellia.—Sir: I think your useful Magazine might be made more acceptable to amateur florists, if your remarks upon floriculture would apply more to parlor cultivation, and its circulation be much extended. The information wanted, is, how plants are to be managed in the dry hot air of the parlor, so as to cause them to flower; and the only way to get that information is, to send it into the parlors, and request some of your fair readers to impart the knowledge they have gained by experience. It is generally understood that the double white camellia cannot be made to flower in the parlor, when the thermometer is between 60° and 70°: if that is true, it may as well be given up at once. I intend to try once more. By a great deal of care, in watering the top of the plant very often, I nearly succeeded in flowering one: the buds did not fall off, but as soon as they opened, the petals dropped. Another season, I shall try a plan which, I am told, has answered the purpose of causing them to flower; it is this,—tie a piece of cotton batting or sponge round the stem, just below the bud, and keep it constantly wet, which will prevent the bud from drying so as to cause it to fall off. If this will answer the

purpose, it is very simple, and easily tried. Perhaps some of your readers may suggest another plan.

It is said the best manure for the calla, is to cut up the old stocks as fast as they die, and spread them on the dirt. I have seen that tried, and it appears to answer very well.

Perhaps these hints may be the means of inducing others to give you some, which will benefit you as well as—*A Subscriber, Boston, March 11, 1841.*

Premium for the destruction of the Canker worm grub.—A subscriber of ours, a gentleman who feels interested in the subject of gardening, has authorized us to offer a premium of *twenty-five dollars* to the person who shall discover a better, and more expeditious and less troublesome way of getting rid of the canker worm than by any of the present modes. Communications upon the subject may be addressed to us.—*Ed.*

Large Pine-apples.—A few days since, a captain of one of the West India vessels at this port brought out a few fine pine-apples, one of which weighed ten or twelve pounds.—*Id.*

Dr. Torrey's Report on the Botany of New York.—Dr. Torrey's report on the botany of New York has appeared in the geological survey of that State, and is the first one of importance received from him. He is charged with the collection and preservation of seven sets of each species, and the arrangement and naming of the whole. From the nature of his duties, the assistance of many observers and collectors, in various portions of the State, was indispensable, and they seem to have placed at his disposal, with truly scientific liberality, their catalogues and collections, for the purpose of enabling him to make out his own catalogue.

"The whole number of species in the State, indigenous and naturalized, including the lower orders of the cryptogamia, probably exceeds two thousand four hundred. Of the phenogamous, or flowering plants, one thousand three hundred and fifty species have been found; of ferns, and plants allied to them, fifty-three species; of the mosses, one hundred and fifty species; of Hepaticæ and Characææ, thirty species; lichens, more than one hundred and fifty; and fungi, at least three hundred. Of the flowering plants, two hundred and seventy-seven are trees or shrubs; one hundred and fifty are reputed to possess medicinal properties; two hundred and fifty are ornamental herbaceous species; and one hundred and forty are plants which have been introduced from other countries, and are now naturalized in our soil. Of proper grasses, our flora contains one hundred and fifty species, twenty-four of which are of foreign origin. In the nearly allied tribe of the sedges, there are one hundred and forty species, more than half of which belong to the genus *Carex*."

The natural method is employed in the catalogue, with the synonyms, locality, time of flowering, &c., and the final report will contain full descriptions of all these plants, and of others that before its publication may be discovered and added to this catalogue of 81 pages, 8vo.—(*Silliman's Journal.*)

Vegetable Coffee.—A plant which answers as a substitute for coffee has been cultivated in Detroit, Michigan, and is now attracting considerable attention in that vicinity. Its botanical name is *Cicer arie-*

tinum, or chick pea, and it belongs to the natural order Leguminosæ, or pea tribe. Its height is from twelve to eighteen inches, not branching, but throwing out its leaves from the stem, and bearing one blossom at the axil of each leaf. Each legume contains two peas. It commences flowering early in summer, and continues till late in the fall, consequently the fruit at the bottom is ripe while it is in full blossom at top. There is but one species, and it is a native of Spain, where it is much used as an ingredient in their olives or soups. It is also much used in France for the same purposes.

It has been cultivated by Mr. Greenwood, of Detroit three or four years, during which time he has used it in his own family for coffee, and he finds no difference between it and that bought at the stores, except that the latter costs eighteen cents per pound, while the former costs nothing, as Mr. Greenwood raises enough for his family for a year on a little patch of ground, eight by thirty feet.

It is easily cultivated. The seed should be planted the latter part of May, or early in June, and the seeds will be ripe early in September; thirty feet square of ground will produce one hundred pounds. The seeds should be planted in hills, eighteen inches apart, one pea in each. The seed may be obtained at the seed stores in Michigan, but we are not aware that they may be had elsewhere. Should this meet the eye of any of our friends in Detroit, we hope they will forward us a few seeds by mail, that we may give it a trial.—(*Western Farmer*.)

The season in New York.—The weather has been changeable this month, vegetation is uncommonly backward, and the gardeners have done little or nothing, as yet; yesterday was a beautiful day, but to-day it rains with the wind south-east, blowing a gale.

Being very fond of gardening, I take an interest in any thing relating to it. I am a subscriber to your Magazine, with which I am very much pleased. It contains a great many highly useful original articles, as well as valuable extracts, well calculated to inspire our gardeners with an honest emulation to excel each other in the beautiful season.

Any information respecting gardening, in this city or vicinity, which it may be in my power to give you, I will do with great pleasure.—*E. E. D., New York, March 23, 1841.*

[We shall be very glad to hear from our correspondent at any time.—*Ed.*]

ART. III. Retrospective Criticism.

Budding Cherries on the wild stock.—(p. 33.) In a late number of the Magazine, you have some remarks in reference to budding cherries on the wild stock. I have found the black Tartarian, and others of that class, to take well by grafting on the wild stock; but

in two seasons they would outgrow the stock so rapidly, that it would be incapable of sustaining the weight of the graft: these were operated upon about eight feet from the ground. I now insert the graft from a foot down to the surface, and with a fair prospect of success. I grafted, last spring, the Montmorency cherry on a large tree of the wild species: they took well, and in the course of three more seasons I expect to have the whole tree changed.—*W. C. W., Baltimore, March 22, 1841.*

Camellia japonica var. *Flôyi*.—Your Baltimore friends are much pleased with your remarks in the last number, touching the *Flôyi* camellia being figured in the Abbe Berlése's work, under a high-sounding foreign name.—*Id.*

Mr. Walker's collection of Tulips.—Mr. Editor:—In your January number of the present year, pages 7 and 8, I perceive you have noticed my tulips in connection with "a rival in a magnificent collection of one thousand bulbs, imported by the Public Garden," giving your readers to understand that my show, the present season, will take place at my own garden in Roxbury. This statement, sir, is not just in accordance with my views of the matter: permit me, if you please, to explain.

The tulips imported by the Public Garden are not, in my opinion, "rivals," but kindred spirits from the court of Flora: viewing them in this light, I shall enter into no competition. It is enough for me to know that a thousand bulbs of this splendid flower are now in the Public Garden, under the care of those who understand their cultivation, and placed, as it were, at the very doors of the citizens of Boston, who will admire and appreciate their various qualities, as they ever do the rare, the lovely, and the beautiful, whenever presented to their view; and so long as the Public Garden shall continue to cultivate this "king of florists' flowers," I shall make no exhibition of my tulips.

My garden will be thrown open, and my collection of tulips submitted to the inspection of my friends and to every lover of flowers, when they are in bloom, under the general invitation of, Come, all ye lovers of Flora, and come and welcome.

I hope to show specimens of some new and choice imported sorts, not to be found elsewhere in this country; and also a few new varieties of my own raising. If I should add to the pleasure of my friends by such a display, it will be, to me, a source of gratification.—*Your friend, &c., S. Walker, Roxbury, March 16, 1841.*

[We most willingly give place to the above explanation. We did not intend to have our readers infer that the Public Garden had procured the collection of tulips for the purpose of competition, but merely to add to the interest of the establishment, and render it more attractive to visitors; our correspondent having, for various reasons, preferred to cultivate his tulips at his own garden, where individuals could come and inspect them, when in bloom, and those who are desirous of purchasing roots could select them while in bloom. We were not aware, however, till we received the above note, that Mr. Walker would throw his collection open to the public, free of admission. This liberality on his part should be met by amateurs and others by a ready purchase of the bulbs, of which he has such a splendid assortment.—*Ed.*]

ART. IV. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Pot and Sweet Herbs.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Parsley, per box,.....		12½	—
Chenangoes, } per barrel,	1 25	1 37½		Sage, per pound,.....		17	20
} per bushel,	50	—		Marjorum, per bunch,....		6	12½
Common, { per barrel,...	1 00	1 25		Savory, per bunch,.....		6	12½
} per bushel, ..	50	—		Spearmint, (green,) pr. b'nch,		12½	—
Eastports, } per barrel,...	2 00	2 25					
} per bushel, ..	1 00	—		<i>Squashes and Pumpkins.</i>			
English, { per barrel,...	3 00	3 50		Squashes, per pound:			
} per bushel,...	1 50	—		Autumnal Marrow,.....		6	—
Sweet, per bushel,.....	—	—		Winter crookneck,.....		5	6
Turnips:				Canada crookneck,.....		6	—
Common, per bushel,....	25	37½		West India,.....		4	—
Ruta Baga, per bushel,...	25	37½		Pumpkins, each.....		8	12½
French, per bushel,....	25	37½					
New, per bunch,.....	25	—		<i>Fruits.</i>			
Onions:				Apples, dessert:			
White, per bunch,.....	3	4		Common, per bushel, ...		62½	75
Red, per bunch,.....	3	4		Extra, per bushel,.....		1 00	1 50
Yellow, per bushel,....	62½	75		Baldwins, per barrel,....		2 50	3 00
White, per bushel,....	75	1 00		Russets, per barrel, ...		2 60	2 25
Beets, per bushel,.....	50	62½		Greenings, per barrel....		2 00	—
Carrots, per bushel,....	50	—		Pearmaine, per barrel,....		2 00	—
Parsnips, per bushel,....	75	—		Sweet, per barrel,.....		2 00	—
Radishes, per bunch,....	12½	—		Dried apples, per pound,.		8½	4½
Shallots, per pound,....	20	—		Pears, per half peck:			
Garlic, per pound,.....	12½	—		Chaumontelle.....		—	—
Horseradish, per pound....	10	12½		St. Germain, per doz....		—	—
				St. Michael Archangel, }		—	—
<i>Cabbages, Salads, &c.</i>				per dozen,.....		—	—
Cabbages, per dozen:				Baking, per bushel,....		2 00	2 50
Savoy,.....	37½	50		Grapes, per pound:			
Drumhead.....	50	75		Malaga,.....		20	25
Red Dutch,.....	75	—		Pine-apples, each,.....		37½	50
Cauliflowers, each,.....	12½	25		Cranberries, per bushel,...		1 50	1 75
Celery, per root:				Lemons, per dozen,....		20	25
Common,.....	8	12½		Oranges, per dozen:			
Giant red and white,....	12½	20		Sicily,.....		20	25
Spinach, per half peck,...	10	12½		Havana, (sweet).....		37½	50
Dandelions, per half peck,...	25	—		Chestnuts, per bushel,....		2 25	2 50
Turnip tops, per peck,....	25	—		Walnuts, per bushel, ...		2 00	2 50
Lettuce, per head,.....	6	10		Castana,.....		—	—
Cucumbers, (pickled) pr gal.	25	—					
Peppers, (pickled) per gallon	37½	—					

REMARKS.—The month of March, though rather unpleasant, has not been accompanied with very severe weather: in the earlier part of the month, a few cold days occurred, but these were succeeded by milder weather. The frost has not been sufficiently out of the ground to allow any planting to be performed, until within a few days.

Potatoes, from the great number of arrivals since the opening of navigation at the eastward, have been received in considerable quantities, and the market is well filled, and prices not so firm as at the time of our last report. Sweet are all gone: a few hundred bushels of French potatoes, which arrived in the Switzerland, from Havre, sold at eighty-eight cents per bushel. Turnips plenty: a few bunches of the new crop made their appearance last week. Onions abundant for the season. Radishes are plenty for the season, and exceedingly good. Cabbages are scarcer: the stock is small, and rather inferior. The principal supply of celery is yet received from New York: some small roots, probably side shoots, taken from the old roots in autumn, and brought forward in a frame, to give the tops a better appearance, have sold well. Spinach and dandelions plenty. Turnip tops just in. Lettuce is fine and large, and a good supply. The stock of squashes is greatly reduced, and but for the arrival of a few West Indias, would be nearly exhausted: the latter came in good order, but are of inferior quality. Parsley is plentiful now.

The stock of good apples has been nearly taken up, and, in consequence, prices have advanced for some kinds: Baldwins, of handsome appearance and good quality, sell at our prices; but even this is worse for the holder of large stocks than if they had been sold at our lowest prices in the autumn; they decay rapidly now. Pears are all gone. Grapes are nearly gone. A few pine-apples, of fair quality, have been selling at our prices. Cranberries have fallen still lower. The supply of lemons and oranges has been multiplied by constant arrivals of large quantities. In nuts, we have nothing worthy of note.—*M. T., Boston, March 29, 1841.*

HORTICULTURAL MEMORANDA

FOR APRIL.

FRUIT DEPARTMENT.

Grape vines.—The vines will now have advanced so far as to show their flower buds: when two shoots appear from one eye, the weakest of the two should be rubbed off, so that all the sap may be thrown into one shoot: by this means it will be strengthened, and the clusters will be much larger. Air should be freely given in all good weather, to prevent the shoots from being drawn out weakly. Syringe the vines two or three times a week, as soon as the buds are well advanced; and when the shoots are a few inches in length, carefully tie them to the trellis. It is best to proceed slowly, rather than to force the vines too much. Vines in pots will now be in flower, if they have been in the green-house or grapery. Where young

plants are wanted, the cuttings may yet be put in. Vines in the open air, not pruned, should receive immediate attention. Transplanting may be successfully performed this month.

Strawberry beds, now uncovered, will begin to push their new leaves. If the manure, which was thrown on in the fall, was not fine and good, let the beds be dressed with some fine old compost; the coarse strawy litter may be removed, leaving the finer part on the beds, to remain. New beds may be planted out this month, and, for our own choice, we prefer planting in the spring.

Raspberry vines should be now pruned, and the shoots tied up to a stake, to prevent their being broken down when the fruit is ripening. New plantations may be made with success.

Gooseberry and currant bushes should be pruned, if not done before, and the soil top-dressed and lightly dug.

Fruit trees of all sorts may now be removed with greater safety than at any other season of the year. Scrape and clean the main stems; look out for the destruction of the canker worm and other insects, and manure and prepare the soil around the trees.

Grafting should be performed where there are old trees to improve, or young seedling stocks intended to be set out in the garden or orchard.

FLOWER DEPARTMENT.

Dahlias will now be among the principal objects of attention, especially where there is a good collection. The roots should be potted, if not done before, and the plants forwarded, in order to get some early blooms. The main stock for planting out need not be started till May. Seed sown now will produce plants which will bloom in September.

Verbenas will be pushing rapidly, and coming into full bloom. Repot, and train the plants to neat trellises, except such as are intended for beds in the open air.

Tulip and hyacinth beds will require care. Stir the soil between the rows, and prepare the bed for the blooming, in May.

Ranunculus beds, planted as directed last autumn, should now be fully exposed, every fine day, to the air.

Camellias will require plenty of water till they have completed their growth. Syringe three times a week over the foliage.

Cactuses which show buds, should be watered more freely, and not be too much exposed to the sun, or the flowers would soon fall.

Erythrina crista-galli.—Roots of this fine plant should now be brought into the house, to forward them to be turned out in May.

Amaryllis formosissima, tuberoses, gladioluses, &c., may now be potted for early blooming.

Dwarf rocket larkspur seed, as well as several of the hardy annuals, such as candytufts, *Silene compacta*, &c., should be planted immediately; the former in small beds or patches, where they need not be transplanted.

Roses, and other shrubs, vines, &c., should be removed this month.

Pæonies, and hardy herbaceous plants, of all kinds, may be now transplanted with safety.

Ericas and Epacrises may be yet put in with success.

Chrysanthemums may now be propagated by suckers or cuttings.

THE MAGAZINE

OF

HORTICULTURE.

MAY, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *An Address before the Middlesex Horticultural Society, Lowell, at the closing Exhibition and Meeting for announcement of Premiums, Oct. 12, 1840.* By JOHN LEWIS RUSSELL, Member of the Society, and Corresponding Member of the Massachusetts Horticultural Society, &c. &c.

[THE following Address, delivered before the Middlesex Horticultural Society, at its first annual meeting, in October last, by our friend and correspondent, Prof. Russell, has been kindly placed in our hands, by the author, for publication in our pages. We do not deem it necessary to make any apology for its length: it will, we believe, be found sufficiently interesting to repay all the time spent in its perusal. Prof. Russell has delivered addresses before the Massachusetts Horticultural Society, the Essex County Natural History Society, and other societies, some of which have been noticed or reviewed by us in our past volumes: from his long and familiar acquaintance with horticulture, they have been highly interesting and instructive productions; but the address we now offer to our readers is more replete with practical information upon the subject of gardening than any of his previous efforts.

The Middlesex Horticultural Society, which has not yet been in existence but little over a year, though in a very flourishing condition, did not feel able to publish this address, and we therefore take much greater pleasure in having the opportunity to offer it through our pages. It will be read with inter-

est by every lover of plants or fruits, and particularly by the enterprising amateur, who will find in it many valuable hints and suggestions in relation to the cultivation of fruits and flowers.—*Ed.*]

Ladies and Gentlemen,—

It is with no ordinary feeling of pleasure, that I again stand in this desk, and appear before you, to address you on the topic of a common interest.

Since we last met for a similar purpose, more than an entire year has elapsed, and, meanwhile, we have anticipated and realized the objects of our solicitude and care. United in a common cause, and that one of the most dignified, as well as philanthropic, which exercises the hands and the mind, I consider it a privilege to address you once more on the subject with which my early and constant taste has rendered me familiar, and to which your attention has manifested an increasing interest on your part.

The range of subjects connected with horticulture is so extensive as always to command the energies and the genius of the mind. From the earliest records of history, to the present glorious era, in its annals there have been a constant and increasing opportunity of adding to our stock of information, and of advancing its progress. The field of our labors belongs to Nature's details and mysteries, and who can exhaust them? What varied and profuse subjects are thus thrown open to us, on which human sagacity can always operate! and, at the same time, how striking the fact, that in the study of the simplest or of the most profound of these, there is enough to interest and delight!

We have passed through a magnificent season, and the vivid tints of an American autumn are warning us of the silent and gradual decay of the vegetable year. The weekly and other exhibitions of our Society have attested not only to the interest manifested in horticulture, but to the luxuriance and richness of the past season. Offering, as the last token of our enterprise, the display of the unrivalled dahlia, and about to lay aside these pleasing vocations for the solid charms of the fireside, and the in-door delights of home; we cannot do better than, before parting, to say a kind, cheering, and farewell word of encouragement and congratulation, to serve as a memento for anticipated and renewed pursuits of the same character, when another blooming spring shall return to this portion of the earth.

The professed object of the Middlesex Horticultural Society, as set forth in its constitution, is "to encourage the culture of plants, flowers and fruits in this county, and to furnish, by public gratuitous exhibitions of them, in this city, an innocent, grateful, and instructive pleasure to our citizens."

So far as the exhibitions have been concerned, we have no doubt as to the success of the scheme. Your crowded halls, in the early experiment, soon convinced the regular committees of management, that the public demanded better accommodations. Each succeeding display was visited by hosts of admirers, and attended by those desirous of profiting by the advantages there afforded. This is encouraging. Were it only to attract hither the young and the old of all classes in society, and to withdraw from the fever of business, and the cares of life, the attention of the community, to renovate the energies by relaxing the mind, it were almost enough to warrant our sedulous attention; but beside *this*, many are the *benefits* which may accrue. Society in great cities becomes too worldly and selfish. It needs more intercommunion and interchange. Independent of our republican principles, we need the cooperation and sympathy of each other. Far above the puerile, and oftentimes worse than *foolish*, distinctions which a difference in the conditions of life make, are considerations which should never be overlooked by the philanthropist. Wealth and the world may recognize distinctions, but mind and goodness know none. If we are truly alive to the progressive improvement of society, we should never overlook the first and best means to promote it. We must know each other's feelings, and understand each other's motives more and better than we now do. It is in this point of view that pursuits such as ours, and all kindred to *them*, may be seen in their happiest light. The studies of nature lead to the most exalted and generous of virtues! When men have a common interest at heart, they entertain a common sympathy. Thus we revere what is only and truly venerable, the development of the mind; and forget, meanwhile, the more trivial and unimportant distinctions, which artificial notions establish.

In a late conversation with one, of whose name I had often heard, but whom I had, until then, never seen, and this individual a naturalist, the following remark was made:—"How easily those who study nature become acquainted; the formality of social intercourse, and all the stiffness of constraint are laid aside at once, in the pursuit of a common cause." I can-

not say whether this remark belongs exclusively to the students of natural history, but in no other have I seen it so remarkably exemplified. If, then, such be the results of these and similar pursuits, such pursuits should be most assiduously attended to. May we see such results among us. The narrow streets of cities beget *narrow notions*. If we shut ourselves out from glorious nature, *we* shall become insensibly *inglorious*. But if we can engraft somewhat of the freedom of wild nature by a *reverse process* of skill, on the stock of constrained and artificial society, the blending may be effective in the production of an agreeable and golden fruit.

Our horticultural society embraces among its members the *young*. This, too, is well. To create a taste for such studies as ours, at an early age, should be the effort of every one who has the true interest of the young at heart. We can conceive of no single vice or low pursuit, to which the young are exposed, which may not be counteracted by the early instruction in the pursuits of the garden or the field. Children and youth are particularly inclined to this branch of easy labor. The picturesque scenery of your busy city invites to a study of the beauties and wonders of nature. The rare and beautiful wild flowers, which have graced your tables, were the humble and happy offerings of youth. The wild banks of the Merrimac, the broad meadows of Tewksbury, the oaken woods near by, the verdant copses of tall trees in your very streets, and midst high piles of masonry, and the diversified flora of your vicinity, are favorable to the study of flowers. The narrow area of your dwelling-houses are capable of affording your children sufficient space for their mimic floriculture, and not a few of the more delicious fruits even might be trained to your sunny walls, by the careful and curious fingers of those little happy inmates, in whom are centred your anxious wishes, and your choicest blessings. The rearing of some dozen fine plants in pots, may occupy a child, or several children's leisure hours; and where the young person of a more advanced stage of life even, to whom such an attention to the wonders of vegetation would be otherwise than ever instructive and delightful? I hail the efforts of the young in their votive offerings to Flora, as among the happiest omens of our day: and I fear not that the efforts of the Society will be abated in their behalf. Discretionary premiums should be established to reward the zeal of those too young for membership, and to foster the taste for these subjects at an early age.

Nor can I forget to offer the meed of high praise due to the other sex, who, by the constitution of your Society, are admitted among its members. As you peruse the annals of natural science, especially of botany and its kindred studies, the names of generous and distinguished patrons from their ranks frequently meet your eye. Foreign botany, in particular, numbers among its most successful and enterprising students several ladies of well known celebrity. Some of the most superb green-houses and gardens in England are the property, and under the management of women of rank, with whom the most profound mysteries of floriculture and the higher branches of gardening are familiar. In more humble life, perhaps, and less known to fame, are individuals, also, whose pencils have aided in the delineation of nature, and in the advancement of natural science. With the female mind, such pursuits as those which engage *our* attention are congenial. The parlor may be rendered more magic in its attractions, by the nurture of some superb exotic under the hands of the wife, the mother, or the sister, and whatever lends a charm to *home* is worthy our attention. Many a child has been won to the graces of life by the ministry of some flower, which affection has reared, and which a *mother's* hand has cherished; and whoever can forget what she loves, or pass an indifferent eye over the simple flower in which she delighted, is so far unworthy the filial relation. Never should the beautiful anecdote of the illustrious Cuvier be forgotten, in his admiration of the red stock gilliflower, because it was his *mother's* flower! Tokens of enduring affection, or of sacred friendship, these living types of beauty may properly become, and no less objectionable gift can be offered to express the civilities of life, or an interest in each other, than some beautiful flower.

The choice specimens of annual and perennial out-door flowers, as well as of well grown pot plants, evince that there are in our midst those among the ladies who are not unfamiliar with the innocent and instructive pursuits of floriculture. May we not anticipate a generous aid and cooperation on their part, in all our efforts towards the enterprise in which the Society has engaged?

The early establishment of *premiums*, for the encouragement of competitors, evinces also that the vital interest and prosperity of the Society was well regarded. The end of its labors was also kept in view, by the limitation of such premiums to whatever was exhibited, being the growth and property

of those who reside in Middlesex county. A county society should direct its attention to county operations. By this method many very valuable statistics, independent of those immediately relating to the efforts and end of the Society, might be collected. Catalogues of its native wild flowers could year by year be obtained, and, connected with them, the times of their first appearance or flowering, which to the botanist are desirable. The progress of horticulture, each successive season, could be ascertained, and comparisons made of its first state and condition with its subsequent. It will be well for the Society to have a regard to these things. Much other information is desirable, could it be collected; such as varieties of fruits and vegetables cultivated each year, their success in culture, mode of culture, and benefits derivable. This course, while keeping in constant view the *main object* of the Society, need not, however, prevent the availing itself of such other helps from abroad and out of the county, which circumstances oftentimes present.

To render the Society yet more effective, an early attention to a library should engage its efforts. The first experiments in exhibition may naturally enough be successful, but to maintain an interest, and to produce its greatest and main end, constant and increasing information should be sought. Here the field of labor opens an extended vista, and invites to an inexhaustible pursuit. The mysteries of the organic laws of vegiculture should become familiar. Long and tedious experiment in personal attention must be a requisite to successful culture, where the reading of books and treatises on the subject has been neglected. We could wish, therefore, to elevate the condition of the Society. It is well, as a mere effort at the innocent entertainment of the citizens of Lowell; it is *better*, that it raise itself to the rank of an institution of philosophic and scientific inquiry. The various committees, on the subjects of their care, need, and must have, the requisite works, for their guides. It is not enough that your tables are loaded with delicious fruits and fair flowers, merely to gratify the eye; but it is essential that their correct names and synonyms be also attached. It is worse than useless, that through deficiency of instruction, and of guides to such knowledge, incorrect and erroneous names are substituted. Nothing retards the advance of useful horticulture among the community, like this. Were ours a mere amateur society, to amuse the eye, I should not speak thus; but I have before my mind the

beneficial object of its institution, "instructive pleasure." The errors and mistakes, sometimes the intentional frauds of nurseries and fruit establishments, for instance, have caused serious damage to the cause of fruit-growing. "We *must* have correct names, or we will not run the risk of such expense in purchasing." This is the justifiable language of our agricultural friends, and it behooves every such society as ours, to remedy the evil.

Could fifty dollars or more per annum, be devoted to the purchase of suitable works, for the more particular use of committees, and others entrusted with the immediate interest of the Society, in a short time a very valuable library might be in a state of formation. In botany, we want Loudon's *Encyclopædia of Plants*; *Florula Bostoniensis*, third edition; Torrey's *Flora of North America*, publishing in numbers, a work indispensable, and an ornament to our country's science; Hovey's *Magazine of Horticulture*, in which are most useful articles on the general subject of horticulture, and many of Manning's articles on fruit; Manning's *Book of Fruits*; Kenrick's *American Orchardist*; Coxe on *Fruit Trees*, (scarce and rare,) &c., &c.

In entomology, the valuable *State Report* of Dr. Harris should be attentively read: and in vegetable chemistry, the works of Davy and Chaptal.

Other fine works on the general subject could be suggested, and some of standard merit. Loudon's *Arboretum Britannicum* is worthy the perusal of every lover of forest trees: and his *Suburban and Villa Gardener* will introduce our fair friends to the gardens and labors of their British sisters, in the engaging pursuits of floriculture.

It is much to be regretted, that the means and pursuits of this country are as yet unfavorable to the publication of similar works of our own science. We need, very much, treatises on American horticulture, and which will pertain to our own interests. In this condition of such a deficiency, we must look to such societies as ours for the experiments of their members. Detailed accounts of successful culture would be of exceeding value, coming from the pens of practical men. Perhaps it may be far distant when the Middlesex Horticultural Society publishes its annals, but the preparation for such a step would be advisable. Every item any individual can add to the general mass of information, may hereafter place on an equal footing with that of other countries, the horticulture of

our own land. Should the mode of culture of any extra fine plant, vegetable, or fruit, the origin, (if known,) of a new apple, pear, or the like, be made a requisite for the obtaining the Society's premium, the plan might be highly conducive to the advance of the science.

To extend throughout the county the benefits which we expect from our Society, we must take some pains to set forth more plainly and explicitly its intention. It should be constantly an endeavor to introduce among our farmers the new and improved kinds of apples and other easily raised fruits. A prejudice, I am informed, is existent against the Society, to its disadvantage. It is considered a mere association to exhibit flowers. Now these are generally regarded by the agricultural interest, as valueless, and more fitting for children than for *their* notice. How erroneous such notions are, we will not now stop to inquire; but would we add to our numbers, and would we be the benefactors of our agricultural friends, we must attend more to our fruits. If you can persuade a single farmer that it would be for his interest to join the county society, for the information he may acquire in the growth of fruit, and in the making profitable his orchard, or even his kitchen garden, then we might reasonably anticipate no trifling results. As to his errors on flower culture, these will vanish, if you can only persuade him to admire with you the noble specimens of fruits which ornament your tables, or to wonder at the huge pumpkins and squashes which lie about the hall. In these he sees *his* interest, and in those he *may* learn to see yours. He will gradually learn, also, to take an interest in an institution which he finds takes into view *his* prosperity and success, while, at the same time, a wider range of the subject may supplant his former narrow and prejudiced one.

Such, then, is the present condition of our Society in its prospects, its duties, and its results. Need we more than an increasing interest in its welfare, to encourage us to persevere? The success of a year's experiment may serve as an evidence of our future prosperity. Let no lack of enterprise cause us to lose sight of the object of our association, that its efforts in the cause of good may be as signal as its commencement augurs.

Although we may scarcely compete with the efforts of the State society, there yet can be no reason why ours should not be *proportionally* as great. The existence of many val-

uable varieties of fruits among the farms and gardens of the vicinity, presents a curious fact in horticultural science. Several of these, with which the books are hardly familiar, may be met with on our county farms, and the product of old trees. The venerable relic of the far famed Chelmsford pear is yet existent on one of the oldest farms of that town. It is a natural fruit, of excellent market qualities, and known as the Chelmsford, Tyngsboro' and Mogul Summer. A mere thin shell of the once extraordinary trunk yet bears a few scraggy branches, and from its roots are four strong suckers, all of which are identical in fruit with the trunk. Before the great gale of September, 1816, it was a very large tree, but being much injured by that tornado, it rapidly declined to its present condition. The stem, however, bears an occasional crop, but was entirely barren the past season. Mr. Manning, the great pomologist, of Salem, remarks, that it is a pear of the largest size, and extremely productive. For many years he searched in vain for its origin; sparing no expense in importing large pears from the French nurseries to identify it. Inquiry on my part enabled me to confer a trifling favor on my friend, and to establish the claim of old Chelmsford to a fine native fruit.

The history of the valuable Baldwin apple is familiar to you, bearing in its cognomen a family name yet existent in our midst. A fine early apple has often been exhibited on your tables, originating also in Chelmsford, and known as the Spalding. The addition of these three natural fruits in our vicinity to pomology, is sufficient to encourage a research into natural varieties, which are, as yet, but little known. It should be our endeavor to find these out, and no pains should be spared in the attempt. Useless, or next to futile, is it to import rare and costly fruits from Europe, which will survive our culture for a few years only, while our own country is the region and natural location of the finest sorts. We must artificially cultivate or raise from seed our own, that they may take the places of those which are becoming defective. Horticulture should, in a great degree, be a *domestic*, instead of a *foreign* subject of study and regard; and in your city where could it find greater examples of the benefit of such?

The culture of the grape might be most successful in the vicinity of this city. Every south and western wall might cluster with valuable and delicious fruit. It is to be suspected that a prejudice against grapes has been raised from the former undue attention to those either of foreign growth, or of a more

southern latitude. In fine warm summers and autumns, like the present, the famous Isabella would ripen finely, and give a most delicious crop, but, ordinarily, it is comparatively a doubtful variety, needing longer seasons to bring it to maturity. But our woods and river banks furnish very good varieties of the fox grape, by many considered little inferior to the Isabella. Choice sorts are occasionally to be met with among our farmers, and these equally productive, under proper management. The grape needs a rich and moist soil; the refuse of your factories furnish excellent materials for its culture. Little or no pruning is best for our native kinds, merely keeping the vines open and clear from dead wood. Better to have well ripened fruit of an inferior variety on our tables, and for domestic uses, than unripe and unwholesome of an uncertain crop. The value of the grape to the farmer has not been duly estimated. A little care regarding the kinds might cover his walls with beauty and profit. Mr. Phinney, of Lexington, has already set a noble example in this way, and his broad, solid walls are exuberant in clustering vines and valuable fruit. A farmer might raise a ton or more per annum, which, at six cents per pound, would afford no inconsiderable revenue. Excellent wine can easily be made from these fruits as well as from the currant, and, without any greater trouble, a beverage far more salutary than that old fashioned product of the orchard, hard cider.

Of the culture of the plum, in this vicinity, I have no means of judging. Gradual experiment can only decide whether such a distance from the sea would be any objection. The plum is a native of maritime districts, and thrives best in alluvial soils in which are deposited marine substances. Its immense value to the horticulturist, as an article for market, is sufficient to induce whatever experiments may be necessary for its growth.

Pears need a rich soil, and warm, moist exposures. Cities are particularly favorable to their growth. Small dwarf trees, of the finer sorts, might be introduced into the culture of confined areas. The superb St. Michael has been found to succeed best in some old gardens in Boston, and, amidst all the diseases now incident to the variety, to produce in such locations the finest specimens of fruit. How far this disease, the blight, may be overcome, remains to be proved. Could any measures be adopted to check its ravages on some of the finest kinds of pears, they would be of a most important bearing on the interests of horticulture. But, meanwhile, we have the

productive and delicious Seckel, and the rich Bon Chrétien or Bartlett, and a host beside, too numerous for detail, and only to be known by an acquaintance with the *details* of our pursuits in this science.

The peach, nectarine and apricot are all most favorably adapted to city culture. Trained to the wall, or planted as near as possible to the sides of the house, they are protected against frosts, and furnish an ornament, and at the same time a luxury of great attraction. One may realize a two-fold advantage in these trees. What more beautiful than the roseate flowers of the peach and nectarine, or the snowy inflorescence of the apricot? The warm sunny days of early April call the latter into life and elegance, to be soon succeeded with as fair fruit. The foliage of the peach and nectarine, too, is highly ornamental and slowly deciduous, while a *certainty* of a crop may be secured.

But quitting for the present, at least, these good things of the earth, the very catalogue of which almost tempts one to turn culturist, who owns an inch of soil, and at which our mouths water in delightful anticipation, all within the capacity of our Society, and worthy its regards, we shall find that there are reasons, also, why our attention to floriculture might promise equal success.

The floricultural year may be divided into four epochs of great splendor, which I shall call,—

1. The Bulbous.
2. The Pansy.
3. The Rose.
4. The Dahlia.

While the entire summer and autumnal months recognize the new and brilliant ornaments of the flower beds, the Verbenas.

Of the first, you may have, in a small area, some of the earliest, as well as the most beautiful visitants of spring. First come the ever welcome snow-drop, peeping from under the wasting snow drift, in the warm, sunny spots of the garden, and reminding you that winter must soon give way to spring. The daring hardihood of this little bulb seems surprising, even to the florist. It is also subject to great variation in its first appearance, and would serve to indicate, in no faint degree, the comparative advance of our springs. Thus, in 1837, it appeared about the 13th of April, while the very next year gives its appearance, in the same spot, the 24th of March. A native of Britain, it there flowers in January. One variety only

is known, the double flowering, which appears some weeks later, and is not half as pretty as the true species. Next come the flamy crocuses, of which little brilliant bulbs alone a most unique and beautiful collection might be formed. First peeps from the ground, following close on the steps of the delicate snow-drop, the royal titled "Cloth of Gold" crocus, so small in size and contour, as to need one's eye-sight improved to see it, unless it is expanded in the bright sun-shine; but stoop to the little beauty, and then observe its brilliant tint and curious contrasted colors—a rich velvety brown without, contrasting finely with a deep gold within. Its whole size is more diminutive than that of the other species; but like many other small items, and some humble virtues, it improves on nearer acquaintance. These bulbs are often imported from Holland with the other kinds, and may be known by its coarsely netted root skin. A very rare variety, with deep purple flowers, is also said to exist.

Next come the yellow crocuses, by far the most common, and of great brilliancy when planted in groups. Then you may have the spring crocus, with splendid large blue or purple flowers, which mix well with the yellow. A few days later will appear the delicate Scotch crocus, of large, open white flowers, most elegantly pencilled with purple veins. These four kinds are the ones usually sold in our bulb stores, and seen in our gardens. Besides these, there are nine more, some of exceeding rarity, and some of great beauty. Another species is worth mentioning, viz. the *C. sativus*, or saffron crocus, which blossoms in the autumn, and from which the true medicinal saffron is derived. Formerly, in England, large fields were used in its culture, and great numbers of women and children employed in plucking the *minute stigma*, which forms the *true saffron*. A disease of a fungus character is incident, so as to destroy entire crops. The autumnal crocus must not be mistaken for quite a distinct bulb, of great beauty, viz. the *conchicum*, of which there are two kinds, single and double. These appear without any leaves, and present a curious and beautiful sight. They are also of great utility in medicine.

And after the spring crocuses have closed their petals, and retired from the scene of their short-lived beauty, come the noble and fragrant hyacinths, glittering like massive crystals, or bending in beauty with their nodding bells. Almost innumerable varieties may be found in the catalogues of Holland bulbs,

but a magnificent bed may be composed of some two or three dozen kinds. Great skill is requisite in properly planting and cultivating these, and, to form a just conception of their true merits, one should visit the fine collections in the vicinity of Boston. Those sold annually at auction are the refuse from the seedling beds in Holland, and can, in no possible degree, compare with full grown bulbs. A bed of hyacinths may be grouped in such a way as to present a most unique appearance. A harmony of colors may be produced, according either to the principles of taste, or according to the culturist's fancy. Beside the oriental hyacinth, there are others of humbler merit, and now little seen, except in old gardens and rare collections, such as the grape, the feather, and the musk hyacinths.

Of tulips, I need say little in commendation. To realize something of their true glories, you must visit Mr. Walker's collection, and the like in possession of some of our amateurs, while a host of fritillaries, irises, lilies, martagons, jonquils, narcissi, with ranunculi and anemones, and many native liliaceous flowers, bring up the rear of the bulbous array of brave and noble flowers.

The second era of the seasons is that of the Pansy. This exquisite flower has never, until a few years, been much cultivated. The genuine pansy is said to be a native of South Europe, and distinct from the *V. tricolor*, or heartsease. There can be little doubt regarding their intermixture, and probably many, if not most, of the present numerous varieties are hybrids. The old blue *grandiflora* may yet be found among us, and seldom makes seed. This, and the old pure white were for some time the only two known in our gardens. The progress of this flower since is curious. While on a visit to Montreal, eight years since, I saw in the gardens of that city a very fine variety, with purple petals, and a golden edge. Having procured seeds, they were given to the Botanic Garden at Cambridge, and from them was reared a similar, called by the gardener in honor of some royal character, whose cognomen, (no flattering respect by the way,) I have forgotten. This was soon noticed by Mr. Walker, and with the two first mentioned and a hybrid; the culture of the finer sorts, begun in this vicinity, under the skill of the pansy grower of Roxbury, in eight years realized some thousand varieties, of every sort and hue. The pansy has also been imported from England, but with scarcely any success. Thus of a lot imported by Mr. Walker, the extreme tip of a single kind, as he assured me,

only survived. This being carefully saved, and caused to root, produced, after the most sedulous care, superadded to the original expense, an ordinary flower only.

The pansy requires a rich, cool and moist soil. To be sure of good kinds, the seed only of the very best must be sowed. This is difficult to procure. Sometimes only a pod or two can be gathered on a large plant. Raise your own seed, if you want to find your experiment successful. As they seldom produce from seed the same, it is plain that they must be saved by cuttings or layers. The pansy has also good and bad qualities, such as form, color, tints, &c. &c. It makes an elegant plant for the parlor, in spring months, blossoming for a considerable time.

The true pansy is the little and old fashioned *viola tricolor*. Who does not remember this as one of the earliest blossoms of his youthful experience? It may be denominated the *child's flower*, so intimately is it connected with infantile sports and pursuits. Exquisite gems of its varieties may be raised. A little attention to it will produce many sorts, as rich as its larger sized co-species. Some of the deepest dyes may be found in the heartsease. Its extreme hardihood should recommend it to our care and notice. The warm, sunny days, equally of late November and early March, expand its petals. How eagerly we pluck its blossoms, laden with the welcome perfume of promised vernal treasures! It is also the poet's flower. And who that loves poetry, loves not the flower, however humble and mean? Thus, among others, the immortal Milton sings:—

—— Flowers were the couch,—
Pansies, and violets, and asphodel,
And hyacinths,—earth's freshest, softest lap.

The season of the Rose next comes under notice. Then, too, comes flowery, blooming June. The queen of flowers, the rose of countless hue and shade, enamels earth's most luxuriant carpet of green in breathing, living lustre. With this interesting flower there "is indeed associated an almost indescribable and instructive feeling of real, refined pleasure, which scarcely any other, the humble violet excepted, can awaken within us. The rose—the first glorious harbinger of joyous summer, and the lingering blossom of its sunny months—the rose, whether wild or cultivated, single or double, rambling and climbing in vagrant festoons, over the thicket and stone wall, or prim and upright under the tutoring care of the curious

and fastidious florist's hand, and rendered, by the wonderful transmutations of scientific skill, the pride of his garden and his heart,—or the rose beneath the window of the snug farmhouse, cultivated to afford a Sunday bouquet, or for its more valued worth, in the simple pharmacopœia of village medicine of healing herbs;—in every situation, and under every circumstance, it is decidedly the most universal favorite flower. Attracting the attention of mankind at an early age of the world, its exquisite beauty, delightful fragrance, and many virtues, have immortalized it by connection with the glorious, the beautiful, the lovely, and the good, in nature and in society. Who has not admired the elegant freedom of the sweet brier—its pale, simple blossoms, fine, delicate petals, and numerous stamens of rich gold, throwing up, in a single season, a vigorous and pliant stem of six or seven feet high, well secured from too rude an attack on its beauty by strong bent prickles; and even, in mid-winter, lends its aid, by its bright scarlet fruit, to grace the magnificence of that frigid scene? And who that has not gazed with wonder on the splendid productions of the florist's garden, indebted to the magic power of the rose for the charms of flowery June?

The number of *species* of roses has been computed as upwards of two hundred, with almost numberless varieties from cross impregnation and accidental variation. South America is the only country which cannot boast of these elegant flowers."

The rose is capable of great attractions as a florist's flower. Several kinds are most elegant climbers, as the multiflora, (tender,) rubifolia, rubrifolia, &c. Others form fine standard plants, as the moss, and some dwarf kinds. While the Chinese and Bengal are best grown in pots, and, when budded, as tree roses. This plan is more practised in Europe than in this country. The best stock for budding is the rubrifolia. By potting the stocks, and suffering them to become well established, you may, after inserting the buds, have fine flowers in six weeks. The yellow tea and Noisette roses are said to do best under this mode of culture. China, and other tender roses, may be made to survive the winter, by covering them. They thus attain greater vigor and beauty of flower. The rose needs variety of soil, according to the kind. The crimson roses need much sand, while the tea roses need virgin soil and good compost. To cultivate the rose to advantage, may be considered a mark of floricultural skill.

Lastly comes, and already is fast passing by, the epoch of the Dahlia, King of flowers and autumn's glory. The surpassing beauty and brilliancy of this flower has raised it in the estimation of the floral taste, whether considered in its single undorned simplicity, or when brought to the acme of perfection by the ingenious labors of the floriculturist. Scarcely unrivalled by the unique elegance of the camellia, it has become, like that remarkably transmuted plant, as universal a favorite among the curious and wealthy; and, still more, a companion of the antique and venerable accompaniments of the ordinary garden or country flower bed, of some humble admirer of nature's sportive wonders,—such as may be found in every community, and not by any means *few* in our own happy, smiling New England.

The history of the dahlia may perhaps be new to some of my hearers, nor would they be unwilling to trace with me the origin of this beaming beauty of our floral festival this day.

The dahlia was originally from Mexico, and introduced into Europe in 1789. From the botanical garden at Mexico it was sent to that of Madrid, where it flowered for the first time, in 1791. Cavinelle, (an eminent ecclesiastic and botanist,) dedicated the genus to Dahl, a Swede, and disciple of Linnæus. In the same year, (1791,) he gave a description of three varieties sent from Mexico, which he considered as three *species*, viz. *pinndta*, *rosea*, and *coccinea*.

In the third volume of *Annales des Museum*, we find a memoir on the dahlia, by Thouin, accompanied by a colored plate of three, *rosea*, *purpurea*, and *coccinea*. *Rosea* was of the size of a china-aster. A few such little flowers of a rose color, we occasionally meet with now. It was not until 1817, (twenty-six years,) that semi-double flowers could be obtained; simultaneous, indeed, with the efforts of the Dutch, and with their similar success. A curious physiological fact was also noticed, that on thin and light soils, the plants produced seeds capable of rearing semi-double varieties, whereas those on rich soils produced single and simple flowers. This was accounted for thus: the greater effort to produce a perfect seed than an imperfect one; the latter *continuing* the aberration from the first true type.

De Candolle, on philosophical principles relative to the law of color, foretold the improbability of rearing a blue colored flower, and, amid the myriad varieties, no such tint has been found. Thus connected, in mysterious and sympathetic union,

are the several laws pertaining to matter, in the varied departments of nature.

The dahlia is a flower of great uncertainty in flowering, so that it is best to possess a considerable number of kinds, to secure a continuance of bloom. It requires a rich, deep, and moist soil, and should be planted out either quite early or quite late; the first for early bloom, and the last for succession. In New York, and on the Hudson, the dahlia displays its bloom at the very time in June when we here are told to plant out our roots. There can be no good reason why ours should not do so; but for this result we must have recourse to early forcing. The dry weather of summer is unfavorable to the buds, and therefore the late planting is on the whole preferable. Should your plant show a few early flowers, and then stand still about mid-summer, cut it down to the first joint, and it will immediately push again for a new flowering. This is not only a valuable hint, but one founded on actual experiment.

The dahlia is subject to numerous foes, both animal and vegetable. Of the latter, a most dangerous and destructive to its healthy foliage, is mildew. This arises from lack of moisture, and will never appear if the plants are well watered. When it comes on, frequent sprinkling over the foliage will check it, and expand the flower buds at the same time. Of insects, the most annoying is a cut-worm, which penetrates the stem, and saps its energy. Use the knife vigorously, and extirpate the foe.

The dahlia is also subject to great variation in its flowers. Take, for instance, the *Striata formosissima*, and in different exposures it will have different blooms. I possess a plant on which the blossoms were all of one color. Such, also, was the case, a few years since, with a magnificent variety, Levick's *Incomparable*. Various theories have been formed to explain for this: some, say soil; some, shade; and some one thing, some another. It will probably remain a mystery, among the hidden laws of vegetation.

The botanical department of floriculture has received an addition to its treasures in the *Dahlia repens*, first flowered in this vicinity by T. Lee, Esq., of Brookline, and imported, by seed, by J. W. Boott, Esq. Prof. Lindley anticipates, by cross impregnation, to produce, in time, a new series of beautiful double flowers, of low stature and elegant foliage, and which will be a great ornament to the flower border.

The introduction of the verbena into floriculture, has been of signal advantage to the elegance of our gardens. New varieties are constantly being raised. Any one may produce them, by sowing the seed. The vivid scarlet, pure white, dark purple, rich lilac, brilliant red, may be most curiously blended, in perfect and unique harmony. A hot sun, poor soil, and open air, are the best means of cultivating them.

Thus have I run cursorily over the field of our mutual labors and enjoyments, in the pursuit of the intention of our Society. It remains for me only to say a parting word, by way of farewell. Interested, as we have been, in a common object, may the delights and ever increasing charms of its successful operation, promote a happy and kindly feeling. The flowers and the fruits of the earth are kind tokens of a Great Being's continued interest in man. Devoutly may a sense of refined, purified gratitude be paid Him. Let the intercourse with the beautiful and harmonious in nature be conducive to the truly beauty and good within us. Let widely extended views of our chosen and favorite studies occupy our minds:—the welfare of others by our humble ministry in the operations of nature, and a true and exalted sense of their importance: for He who formed the lilies of the field, clothed them in unrivalled beauty for our instruction, and gave them us as mementos of His wisdom, power, and love.

ART. II. *Notice of some rare Plants of New England, with descriptions of some new species.* By WILLIAM OAKES, Ipswich, Mass.

THE plants here noticed have been many years in my possession, and a great part of them were collected in 1829, by my excellent friend, James W. Robbins, M. D.

Eleocharis Robbinsii.

Description.—Root fibrous, sending out at the base of the culms, long, slender, horizontal, dark brown shoots, with short, distant scales. Culms, several from the crown of the root, (clothed at the

base with an obliquely truncate sheath, which is 1—2 inches long,) erect, eight inches to two feet or more high, often without spikes, pale green, sharply triangular, the sides rather concave, with many furrows. Spikes three lines to an inch long, about a line wide, lanceolate or linear, acute, scarcely wider than the culms. Scales, three to nine, about four lines long, lanceolate, rather obtuse, pale green, many ribbed, thin, with a white membranous edge, becoming pale brown when the fruit is ripe. Nuts about a line long, obovate, rather sharply triangular, reticulate, pale brown. Style longer than the scales, three-cleft at tip, tapering from its shrinking persistent base, which is about one third as wide as the nut. Bristles about six, nearly twice as long as the nut, strong, retrorsely hispid. From the crown of the root arises a whorl of numerous very fine capillary abortive stems, a foot or more long, green, and floating in the water, in a radiant manner, around the erect stems.

Grows in shallow water on the borders of ponds and in ditches. At Pondicherry pond, Jefferson, N. H., Dr. Robbins, July, 1829. At Cook's pond, and other ponds in Plymouth, Mass., and in ditches at Manchester, Mass, July and September, 1839.

This interesting species is probably not rare, but it easily escapes notice, especially the floating capillary stems, which I observed for the first time at Plymouth, in July. The plant is frequently left dry in the autumn, when of course the capillary stems disappear. This is probably the species which Dr. Torrey mentions in his *Cyperaceæ*, *Annals of New York Lyceum*, Vol. III., p. 314, received by him in an immature state, from Benjamin D. Greene, Esq.

Galium Littellii.

Descr.—Root perennial, being a portion of the old stem; with slender, blackish fibres at the joints. Stem quadrangular, with pale angles, smooth, 5—7 inches high, with a few long, spreading branches, sometimes nearly simple. Leaves four in a whorl, large, 5—12 lines long by 3—8 lines broad, round oval, round obovate, or roundish, very obtuse, with a minute point, smooth, except a few scattered white pointed hairs, margin ciliate with the same hairs. Branches few-flowered. Flowers, two or three together, on pedicels radiating from the same point, the main peduncle 1—2 inches long, the pedicels 3—8 lines. Petals four, white, smooth, ovate, acute. Divisions of the fruit roundish, covered with very long whitish hairs, which are curved and blackish at the points. Flowers in July.

I found this species in moist, springy ground, in the woods on the side of the White Mountains, in 1826; and I have received young specimens of the same from Dr. Charles Pickering, without flower or fruit, collected before that time by the late Henry Little, M. D. Mr. Tuckerman has lately found it on the Mansfield mountain, Vermont.

Erythræa Pickeringii.

Descr.—Root of moderate size, branching below, whitish, apparently annual. Stem erect, six to twelve inches high, dichotomously branching from the base or middle. Branches strict, and nearly erect, several inches long, stem and branches angular, and almost alated by

the decurrent mid-rib and margins of the leaves. Leaves about an inch long, clasping, the lower ones oval, obtuse, the upper ones lanceolate, acute, both with a minute point. Flowers sessile, some in the forks, but mostly on the sides of the long branches. Divisions of the calyx linear, acute, erect, four lines long. Corolla eight lines long, slender, the tube contracted at the neck below the mouth, the lobes spreading, ovate, obtuse. Stamens from the neck of the tube, extending rather beyond the base of the lobes. Anthers linear-oblong, at first erect, but afterwards twisting outwards. Ovary lanceolate, terete, half as long as the calyx. Style filiform, shorter than the stamens. Stigma dilated, roundish, and deeply bilabiate. Leaves rather fleshy, pale green. Corolla rather pale rose, the tube nearly white. Anthers yellow. The whole plant very smooth, and intensely bitter, like the rest of the genus.

On the sandy margins of the sea shore, Nantucket, where I found it in September, 1829. Dr. Pickering informed me that he found it a year or two before, on the coast of Maryland.

Potamogeton Robbinsii.

Descr.—Leaves lance-linear, sheathing the stem with the adnate stipules, the lamina auriculate at base, the margins finely ciliate-serrulate. Stem long, with long branches, the leaves rather crowded, 2—4 inches long, 3—4 lines wide, somewhat two-ranked, green, many-ribbed, acute. Sheathing base of the leaves half an inch long, adnate to the stipule, the free part of which is produced about half an inch above, and is membranous, white, and somewhat lacerate. Spikes oblong. Flowers rather small. The ciliate serratures are not seen distinctly without a lens.

This curious species was found in Pondicherry pond, Jefferson, N. H., by Dr. Robbins, in 1829; and by myself, in the same year, in ponds in Wenham, Mass. I have since seen it in ponds in Plymouth, and I have little doubt that it is common, but probably confounded with *P. zosterifolius* or *compressus*.

Sabbatia campanulata. Torrey, *Flora of the Northern States*, p. 217. *Chironia campanulata* Linn., *Sp. Pl.*, Vol. I., p. 272. *Sabbatia stellaris*, Hitchcock's *Cat. Mass.*

This long lost species was found before 1829, by T. A. Greene, Esq., at Nantucket, and published in Hitchcock's *Catalogue*, under the name of *S. stellaris*. It exactly agrees with the description of Linnaeus, who received his specimens from Kalm. Though it resembles *S. stellaris*, it seems abundantly distinct in its leaves dilated, not narrowed at the base, and in the linear subulate, almost filiform divisions of the calyx, which are frequently as long as the corolla. The yellow star, also, is destitute of the deep red angular border of *stellaris*, it being only indistinctly bordered with faint brownish purple. The flowers are almost always five-parted, and the corolla is deep bright rose.

In moist hollows in Squam, Nantucket, in Mr. Greene's locality, September, 1829.

Utricularia Greenii. *U. resupinata*, Hitchcock's *Cat. Mass.*, Bigelow's *Flora*, third edition, p. 10.

Descr.—This species grows in shallow water, on the borders of ponds. The base of the stem sends out into the soil many branching, white, filiform roots, which have a few white, transparent bladders, and send up a great number of erect, green, filiform, tapering shoots, above the surface of the soil. These shoots, which are probably abortive stems, are an inch or more long, and have distant partitions like joints. Stem erect, six inches or more high, slender, but pretty firm and stiff, with two opposite broad scales an inch below the top. Flower terminal, single. Corolla rose or purple, with a very long tube, and a rather short, obtuse, spur, which is very distant from the lip. The corolla being terminal, and the spur very distant from the lip, it has a resupinate appearance at first sight, but the corolla is set on to the peduncle as in other species of the genus. I regret that my notes from the fresh plant are mislaid.

This curious and pretty species was first found by B. D. Greene, Esq., at Tewkesbury, Mass., and afterwards by the botanists of Plymouth, Mass., at Cook's pond, and other ponds in that town, where I saw it in great abundance, in July, 1839. *Utricularia cornuta* has frequently abortive stems of the same kind as this species.

Phaca Robbinsii.

Descr.—Root woody, with a thick pale bark, long, thick, branching and firmly fixed in the fissures of the ledges of rock, on which it grows. Stems rather numerous, about a foot high, simple, erect, sometimes a little decumbent at base, rather slender, slightly angular and grooved. Stipules triangular-ovate, acute or obtuse, 2—3 lines long. Leaves bluish green, paler beneath, 2—4 inches long, generally with 4 or 5 pairs of leaflets, sometimes three or six. Leaflets opposite, or nearly so, on petioles about a line long, oblong-elliptic, the terminal one larger, and often inclining to obovate, all very obtuse, and frequently emarginate. Peduncles about three, from five to ten inches long, nearly erect. Raceme ovate, becoming oblong and loose, 12 to 20 flowered. Flowers horizontal, about six lines long, on very short pedicels. Bractes oblong, obtuse, longer than the pedicels, but not half as long as the calyx. Calyx tubular-campanulate, the teeth triangular-ovate, acute, not one third so long as the tube, the two upper ones more distant. Corolla twice as long as the calyx, white. Vexillum obovate, broadly rounded, and often emarginate at tip, the sides moderately reflexed. Wings as long as the vexillum, oblong, obtuse, on a linear claw not so long as the calyx, strongly auriculate. Keel oblong, obtuse, not so long as the wings, on a broader claw, and also auriculate. Stamens diadelphous, nearly as long as the corolla. Anthers roundish, yellow. Ovary lanceolate, tapering into the subulate smooth style, which is as long as the stamens. Stigma yellow, capitate, roundish, about twice as wide as the tip of the style. Legumes dependent, pale brown, turgid, veined, scarcely coriaceous, about an inch long, on a slender stipe about as long as the calyx, oblong, cymbiform, acute, tipped with the recurved persistent style, the upper placental suture curved, the other suture straight. Neither of the sutures are introflexed, though an almost imperceptible, thin, narrow margin appears within the lower one. Seeds three to nine, generally about six, on pedicels as long as themselves, brown, smooth, minutely pitted under a lens, flattened, roundish, the hilum in a

rounded sinus. Lower side of the leaves and the inner surface of the legumes with short, appressed, whitish hairs. Stem, bractes, outer surface of the legumes, and especially the calyx, with black hairs of the same kind.

May, June.—On rocky ledges, overflowed in the spring, on the banks of the Onion river, Burlington, Vermont. Dr. Robbins, 1829.

Anemone hudsoniana Richardson. Torrey and Gray, *Flora*, Vol. I., app., p. 658. *Anemone multifida* D. C., Torrey and Gray, I., 13.

On rocky ledges on the banks of the Onion river, Colchester and Burlington, Vt. Dr. Robbins, 1829. The flowers of this species, at this locality, are dull white, sometimes tinged with rose, not dark red, as in the New York specimens. Still I consider that this must be distinct from the plant of the Straits of Magellan.

Anemone cylindrica Gray. Torrey and Gray, *Flora*, I., 13. var. *alba* Oakes. Flowers larger, sepals white.

On rocky ledges in Castleton, Burlington, and other places in Vermont, also in Uxbridge, Mass. Dr. Robbins, 1829.

Anemone pennsylvanica Linn. *Mant.* 247.

South Hero, Vermont. Dr. Robbins, 1829.

Turritis glabra. Torrey and Gray, I., 78.

On a rocky ledge in Paradise, Salem, Mass. Dr. S. Bass, 1819.

Cardamine pratensis. L.

Canaan, Connecticut, and various places in the north of Vermont. Dr. Robbins, 1829.

Nasturtium natans D. C. b. *americanum* Gray. Torrey and Gray, I., 75.

Very fine specimens were collected by Dr. Robbins, at the mouth of the Onion river, Ferrisburg, Vermont, in June, 1829.

Myriophyllum scabratum Mich. II., 190.

At Block Island, Dr. Robbins, 1829. At Plymouth, Mass., Oakes, 1839.

Tillæa simplex Nutt. *Gen. App.*

On the dried borders of small ponds, at Nantucket, 1829.

Polygala Nuttallii, Torrey and Gray, *App.* to Vol. I., p. 670.

In Martha's Vineyard, Mass., 1829.

Conioselinum canadense, Torrey and Gray, I. p. 619. *Selinum canadense* Mich. *Cnidium canadense* Sprengel.

I found this long overlooked species in Lubec, Columbia, and Bangor, Maine, in 1829. In 1829 Dr. Robbins found it in many parts of

Vermont and Connecticut. In 1839, I had the pleasure of finding it in Mast swamp, Plymouth, Mass.

Flœrkea proserpinacoides Willd.

Castleton, and other places in Vermont. Dr. Robbins, 1829.

Viburnum Oxycoccus Pursh, var. *eradiatum* Oakes. *V. pauciflorum* La Pylaie

This differs from *Viburnum Oxycoccus* in no respect but in the want of rays, which is caused by its alpine situation. On the alpine region of the White mountains, near the limits of trees. Dr. Robbins, 1829. Mr. Tuckerman and Mr. McRae have lately found it on the Mansfield mountain, Vermont.

Senecio aureus L. b. *lanceolatus* Oakes

This curious variety has lanceolate acute radical leaves, two or three inches long, and lanceolate stem leaves, pinnatifid at base, but in other respects it does not differ from *S. aureus*. Shady swamp at Brownington, Vermont. Dr. Robbins, 1829.

Heleastrum album D. C. Pr. 5, 264. *Chrysopsis alba*, Nutt.

Pownal, Vermont. Dr. Robbins, 1829.

Campánula glomerata L.

In Dark Lane, Danvers, where it has been naturalized many years, and was first found by Andrew Nichols, M. D.

Arbutus alpina L.

On the alpine regions of the White Mountains. Dr. Robbins, 1829.

Vaccinium cespitosum Mich. b. *foliis majoribus* Hooker. Fl. Bor. Am. II. p. 33, pl. 126.

On the alpine regions of the White mountains. Dr. Robbins, 1829.

Vaccinium canadense Richardson Hook. Fl. Bor. II. 32.

Abundant in the north of New England, and on the alpine region of the White mountains. 1826.

Pteróspora Andromèdea Nuttall

In Colchester and Burlington, Vermont. Dr. Robbins, 1829.

Pyrola minor L.

In woods at the base of the White mountains. Dr. Charles Pickering and William Oakes, 1825. Exactly agrees with European specimens. Only two or three plants could be found in the locality, which was in E. A. Crawford's old path to Mount Washington, a few miles below the old camp.

Thymus serpyllum L.

In a dry pasture at Boxford, Mass. Dr. George Osgood and William Oakes, August, 1819.

Polygonum articulatum L. b. *múltiplex* Oakes

Stem short, branching from the base, branches very numerous, greatly crowded. Ipswich, Mass., 1825.

Oxyria reniformis R. *Brown* *Rumex digynus* L.

On the alpine region of the White mountains. Pickering and Oakes, 1825.

A'rnica montàna.

Alpine region of the White mountains. Pickering and Oakes, 1825. Mr. Tuckerman, 1840.

Rumex maritimus L.

On the borders of brackish ponds in Martha's Vineyard and Nantucket, Mass., 1829. Exactly resembles the European plant.

Ulmus racemosa. Thomas in *Sill. Journal*, 1829.

This species, with corky branches, was found in 1829 by Dr. Robbins, in many places in the western part of Vermont.

Quercus macrocarpa Mich.

This species of oak, very unexpected at the north, was found growing all over the western part of Vermont by Dr. Robbins, in 1829.

Pópulus balsamífera, *cándicans*, and *monilífera*.

Native in many parts of Vermont. Dr. Robbins, 1829.

Pópulus heterophylla L.

Milford, Connecticut. Dr. Robbins, 1829.

Sàlix herbàcea L.

On the alpine regions of the White mountains. Pickering and Oakes, 1825.

Sàlix U'va úrsi Pursh, II., 610.

This is doubtless the *S. U'va úrsi* of Pursh. It comes near to *S. retusa* of Europe, but is perhaps distinct. Alpine regions of the White mountains, 1826. Found since by Dr. Robbins and Mr. Tuckerman, on various other mountains in New England.

Sàlix fúsca L. *S. repens* L.

On the alpine regions of the White mountains, 1826.

Tipulària díscolor, Nutt. *Gen*.

In woods in Martha's Vineyard, Mass., 1829.

Habenària obtusàta R. *Brown*. *O'rchis obtusàta* Pursh, II., 538.

On the sides of the White mountains. Pickering and Oakes, 1825. Lubec, Maine, 1828.

Tofieldia glutinosa Pursh. *Narthécium glutinosum* Mich.

On the banks of the Kennebec, at Teconic Falls, Maine. Dr. Robbins, 1829.

Schöllera graminea Muhl.

In Otter Creek, Vermont. Dr. Robbins, 1829.

Zannichèllia palústris L.

In lake Champlain. Dr. Robbins, 1829.

Aira atropurpúrea Wahl. Fl. Lapp., 37.

On the alpine region of the White mountains. Pickering and Oakes, 1825. Dr. Robbins, 1829. Mr. Tuckerman, 1840.

Phlèum alpinum L.

On the alpine regions of the White mountains. Pickering and Oakes, 1825. Mr. Tuckerman, 1840.

Pòa alpina L.

On the alpine regions of the White mountains. Pickering and Oakes, 1825. Mr. Tuckerman, 1840.

Càrex capillàris, and *Càrex capitata*.

On the alpine regions of the White mountains. Dr. Robbins, 1829.

Atheropògon apludoides Muhl.

On the banks of the Housatonic, at Derby, Connecticut, 1828.

Lòlium temuléntum L.

I have observed this for many years in great abundance in barley fields, in Ipswich. It is constantly reaped and sowed with the crop.

Eleócharis olivàcea, Torrey, Cyp., 300.

Borders of ponds at Plymouth. Mr. Tuckerman.

I found these three species in abundance, on borders of ponds in Plymouth, Mass., 1839.

Eleócharis melanocárpa, Torrey Cyp. 311.

Sandy borders of West pond, Plymouth, Mass. Tuckerman and Oakes, 1839.

Psilocárya scirpoides, *Sclèria reticulàta*, and *Fuirena squar-ròsa*, b. *pùmila*.

Pánicum verrucòsum Muhl.

Plymouth, Mass., 1839.

Polygala cruciàta L. b. *álba* Oakes.

Flowers white. Plymouth, Mass., 1839.

Ceratoschœnus macrostàchys, Torrey Cyp. 369. b. *inun-dàtus* Oakes.

Corymbs almost wholly terminal. Clusters loose, few flowered. This variety appears at first sight like a distinct species. Grows in deeper water than the common one, which is the cause of its differ-

ent appearance. West pond, Plymouth, Mass. Mr. Tuckerman, 1839. The common form is very abundant, at the same locality.

Tsoëtes lacustris L.

In Fairfield, Conn., and in Uxbridge, Mass. Dr. Robbins, 1829 and 1830.

Ipswich, April, 1841.

ART. III. *Some Remarks on the cultivation of the Tulip.*
By S. WALKER, Roxbury.

AFTER several years of care, of labor, and of pleasure, in the cultivation of the tulip, I will, with your permission, lay before your readers my mode of culture; in doing this, permit me to propose the following statement, with this single remark, that by the treatment and management now submitted, I have bloomed many thousands of bulbs, for several years, with very considerable success.

Nothing tends so much to ultimate success, as a good beginning; I shall therefore commence by pointing out a suitable location for, and the formation of a tulip bed; with a description of the soil, and compost, for the successful cultivation of this beautiful flower.

THE BED.

Its location.—The bed should be placed in an open, airy situation, free from the shade of trees, and so far from any building, that the rays of the sun may rest upon it from its rising until four o'clock in the afternoon; it should also have a good drainage to carry off any surplus water; for this purpose, (if the land lies low, or on a level,) a trench should be dug around the bed three feet deep, three feet wide at the top, and two and a half feet wide at the bottom; the trench should be filled up with stones, to within eight inches of the top, upon which should be placed three or four inches of sea weed, or carpenter's shavings, and then covered over with gravel or sandy soil; but when a situation elevated some three or four

feet above the level, and the subsoil is sufficiently loose to carry off the surplus water, *that* is the proper location for a tulip bed.

Its formation.—Having selected the location, the bed should be made four feet wide, and of a length proportionate to the number of bulbs to be planted; a bed twenty-one feet long will contain two hundred and eighty bulbs, placed six inches from the edge of the bed, and six inches apart each way in the bed. The length and breadth of the bed being marked out, it should be trenched, and the soil thrown out to the depth of twenty inches, which should be removed to some other section of the garden, and the bed filled up with the following soil, prepared for that purpose.

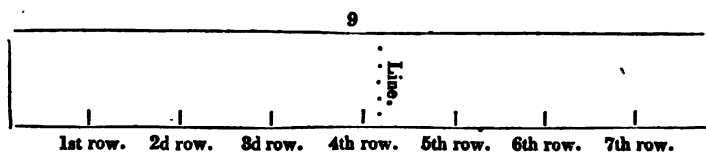
Soil.—The tulip flourishes in a rich loam, that has been exposed to the action of the sun and air for a considerable length of time; therefore the top spitting of a rich soil from a bed, in which vegetables or flowers have been cultivated, and in which the manure is thoroughly decomposed, mixed with about the same quantity of good rich virgin soil, forms a suitable compost for the first planting; this may be enriched annually with a compost prepared as follows:—

Compost.—In the month of June or July, to every two cart loads of good rich virgin soil, add one load of well rotted cow or horse manure, (cow manure is preferable;) mix them well together, and turn the heap over frequently during the year, always crowning it up to throw off the water. In October add eight bushels of coarse sharp sand, and half a bushel of air-slacked lime, which repeat in April; let the sand and lime be thrown in as the compost is turned over, that they may be thoroughly amalgamated with the whole mass. The lime will aid to sweeten the soil, destroy the insects, and pulverize the whole; rendering it fit to be applied to the bed, from year to year, in such quantities, as the cultivator may see the growth of his plants will require.

Preparation for planting.—The bed having been filled up six inches above the level, with the soil, or enriched with the compost as above stated, (this should be done in July,) it should frequently be turned over during the summer, and all the stones larger than marbles should be thrown out; the surface of the bed should at all times be kept highest in the centre, or, as it is technically termed, crowning; by this means the heavy rains will be thrown partly off, and the bed kept ready for planting at any time after twenty-four hours fine weather.

PLANTING.

It is important that the planting should be done at the right season, and in a proper manner. Towards the middle of September the surface of the bed should be rolled over and made level, to ascertain whether too much or not enough soil is in the bed, taking from or adding to as the case may be; bearing in mind to keep the surface six inches above the walk, and crowning. Between the 20th of October and the 10th of November choose a fine day to plant; commence in the morning by removing about five inches of the soil from the top of the bed, laying it aside, to be replaced when the bulbs have been placed in their proper positions. The top of the bed (after five inches of soil has been removed,) will be but a little above the walks, which should be rolled over and crowned up in the centre; after the bed has been thus prepared for planting the bulbs, a small line should be placed about two inches from the centre of the bed, extending from end to end, as a guide for the planting-board, which should be marked to correspond. The planting-board should be four feet long, six inches wide, and marked and numbered thus, (*fig. 9.*)



Place the board six inches from the end of the bed, with row No. 4 exactly in the centre of the bed, and, of course, two inches from the guide line. Every thing being thus arranged, commence planting by placing a bulb, in an upright position, opposite each of the numbers; having done so, remove the board backwards six inches, and place another row in the same manner, and continue so to do, until you have completed your planting. Other pieces of board may be laid upon the bed, which will enable the planter to stand on the top, and in this manner, (although the work will proceed backwards,) yet it will be done to advantage, as the pressure on the soil will promote the future growth of the bulbs. If the soil be very rich or stiff, a tea-cup full of virgin soil, mixed with a little coarse sand, may be placed around each bulb as they are planted. After the bulbs have been thus placed, they may be covered up with the soil taken from the top of

the bed, passing as much of it through a coarse sieve as will cover the tops of the bulbs;* the residue of the soil may be put on with a shovel, in an even manner, all over the bed, which will place the crown of the bulbs about four inches below the surface; the bed may then be rolled over, and crowned up as before stated, and the planting is finished.

PROTECTION DURING THE WINTER.

As soon as the winter has fairly set in, and the frost has penetrated the soil some three or four inches, cover the bed with sea-weed, boughs, or other light substance, not more than two inches in thickness. The covering should be secured against the effects of the wind, by placing some heavy substance across the bed. In the spring, as soon as the winter is broken up, the covering should be removed, when the bulbs will be found to be pushing through the soil.

TREATMENT IN THE SPRING.

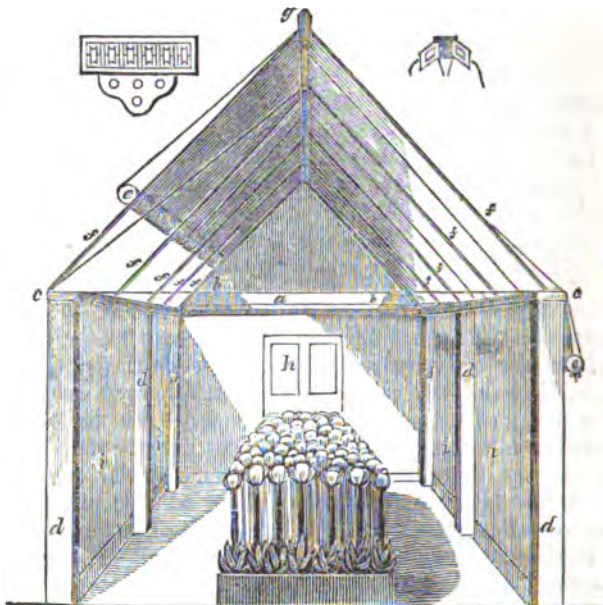
From the time the tulip bed is uncovered to the period of their bloom, the bed should be kept clear of weeds, and the surface, between the plants, should be loosened every ten or twelve days; this should always be done when the weather is fine and the foliage of the tulips dry; great care should be taken that the plants be not injured, or the flower buds broken off. A few days previous to the plants coming into bloom, a frame, or tulip-house, should be erected over them, with suitable awnings, so arranged on rollers and pulleys, that the sun and air can be admitted or excluded, as the state of the weather may require.

The erection of a proper tulip-house is attended with some expense, and it will not be supposed that every cultivator or amateur of the tulip will erect one; but if the bed contains choice kinds, their beauty would soon be destroyed, unless some measures were taken to protect them from the rays of the hot sun. This may be done in various ways: but, as there may be some cultivators who may be desirous of having a proper tulip-house, such as I have had constructed, the annexed engraving, (*fig. 10.*) of one is given. This is copied from an excellent work called the *Flower Garden*, by Mr. Mackintosh, and is erected in the same manner as my own.

* This operation should be very carefully performed, or the bulbs will be thrown out of their places, and turned upon their sides.—*Ed.*

The size of the house should be governed by the width and length of the bed. It should be made at least ten feet wider and longer than the bed, so as to admit of a walk on each side, about five feet wide. The bed is thus described:—

10



a, is the under calico, for the purpose of intercepting moisture; *b*, iron ties; *c*, plates; *d*, posts, which should be from six to seven feet above the level of the garden; *e*, end section of wooden rollers; *f*, rafters, which look much neater if made of iron rod, about the thickness of that used for hurdles; *g*, ridge-board; *h*, doors, of which there should be one at each end, for the convenience of admitting a current of free air when the weather is too inclement to allow of the awning being pulled up. This is effected by very simple means; the lines pass through staples in the side of the ridge-board, where a knot at the end fastens them, and the lines must be brought down under the pole, and made to pass through a fixed pulley at the top of each line. They are then to be brought down, and those on each side passed through a block containing as many pulleys or sheaves as there are lines. By these means, all the lines, attached to each side of the awning, will be collected into one parcel, and either one side or both can be raised or lowered to any degree that may be necessary. *i*, represents the sides of the frame work, which should be closed with canvass, drawn as tightly as possible.

TREATMENT WHILE IN BLOOM.

This is the period the florist expects to reap the reward of his labors. As the buds begin to show their various colors, and to open their cups to the genial influence of the sun, great attention should be given to them; if the rays of the sun are powerful and scorching, the awnings should be lowered to shade the flowers, and rolled up again as soon as it can be done with safety, as the covering is only intended to protect the bloom from the *mid day sun*, and *during storms of wind and rain*. In fine cloudy weather, or during warm gentle showers of rain, the awning should be up, and always kept up during the night, (unless the appearance of a storm forbid it,) that the plants may receive strength and vigor from the dews and midnight air. If the season should prove dry, and the weather hot, soft water, when it can be obtained, otherwise water that has been exposed to the action of the sun and air for at least twenty-four hours, should be applied, late in the evening, moderately and cautiously, between the rows, through the rose of a watering pot; the plants may also be syringed lightly, after the cups have closed up for the night, which will greatly refresh them.

TREATMENT AFTER THE BLOOM.

Remove the awning entirely, as soon as the bloom is over; cut off the seed pods, and stir up the soil; continue to keep the bed free from weeds, and the soil loose about the plants.

Taking up the bulbs.—In a few weeks, the foliage and stems of the flowers will become withered, at which period the bulbs may be taken up. Care should be taken in this operation, that they be not bruised or cut; a small spade or round pointed trowel, will be found to answer for this purpose very well. When removed from the soil, they should be put into a dry room, exposed to the air, but not to the sun. When the bulbs are dry, all the soil should be removed from them, and then put away in boxes or bags. Persons cultivating large beds of tulips of the finer varieties, under name, keep them in boxes made expressly for that purpose, with seventy apartments in each box, viz. seven rows across by ten in depth; each apartment being marked and numbered to correspond with a book containing the names of the bulbs in each of the different apartments. While the plants are in bloom, the flowers are examined by the cultivators, to ascertain whether they correspond with the record book; if they do, they are checked; if not, a memorandum is

made, and the error is corrected at the time of planting, or an alteration is made in the book, to correspond with the bed. This may appear a troublesome and difficult task, but it is not so; the plan is simple, and may with ease be put into practice. When only a few tulips are cultivated, they may be readily kept in bags, as may those grown in mixtures, without names, at all times, whatever may be the number cultivated.

REMARKS.—The English florists have written much about protecting the tulip against the frost, and on this account, rather than from my own experience of its necessity in this country, I have presented a suitable “protection during winter,” which will certainly do no injury, and may, when the soil is subject to heave, do much good. The tulip is, in my opinion, a very hardy plant, and not subject to injury by our most severe winters, when planted in a suitable soil, and in a proper location.

Offsets should be planted from the 1st to the 20th of October, two inches deep and three inches apart, in the same manner as the longer bulbs.

The rays of the sun are very injurious to the bulb of the tulip; they should therefore be covered up as the planting progresses; they should also be taken under cover as soon as possible after they are taken up.

It is the practice of some to plant with a dibble, or, as it is sometimes termed, a dibber. This plan is often injurious, as it compresses the soil too firmly round the sides of the bulbs; and unless the bulb is fairly planted, and the hole made by the dibble completely filled up, water finds a lodgement there, and rots the roots. In the planting, the bulbs should be so arranged that the varieties with the highest stems should be placed in the centre of the bed, that is, in row No. 4, and the others decreasing in height progressively to each side of the bed. When grown in mixtures, and without names, this cannot be accomplished; but when purchased by name and catalogue, they can readily be so arranged, and their various colors intermixed, as the height and color of each variety is always designated in the catalogue of every good cultivator.

The loose skin, fibres, and such offsets as are easily separated from the bulbs, should be taken off in August, observing not to leave the roots too bare. The last brown skin, which is intimately connected with the root, should remain on

it till the time of planting; it should then be taken off, and the root left bare; but it should be performed with care, to avoid bruising or wounding the bulb, especially at the lower end, where the roots are formed, for that is at this time extremely tender, and will scarcely bear to be touched. It may be proper to remark that this skin is usually removed with the thumb and finger, but when it adheres so closely as to require a knife to remove it, it will be well to let it remain, as the application of a sharp instrument to the base of the bulb oftentimes proves fatal. The action of the sun and air on the bulb, after the skin is removed, is deleterious; it should therefore be planted, and covered with soil as soon as practicable.

It may be asked by some why the use of sand, usually applied to the roots, and almost universally recommended in the works of foreign cultivators of the tulip, at the time of planting, has been discontinued? the answer is, that having the bed well drained, and the soil properly prepared, sand is not necessary. But when the land lies low, and a good drainage cannot be obtained, then sand may be used to advantage. In this case, care should be taken that the sand be sweet and clean; if it is made foul by the urine of dogs, cats, or any other animal, it is unfit for the purpose, and would, if applied, prove very injurious to the bulbs. Sand intended to be used at the time of planting, and to be brought into immediate contact with the plants, should be exposed to the sun and air during the summer; it should be frequently turned over, and kept free from impurities; that taken from a fresh water stream is probably the best.

As some amateurs may like to amuse themselves by employing their leisure moments in raising new varieties from seed, the following hints are given for their use.

RAISING TULIPS FROM THE SEED.

The propagation of the tulip, by seed, is but little known, and still less practised in this country. The Dutch and French florists send their seedlings, which we call *breeders*, to England, and other parts of the world, where they are cultivated until they *break*, that is, *change their color* and prove new varieties, of the variegated classes of roses, bizzarres, and bybloemens, as the case may be. Probably only one in a hundred, when so broken, will be named by the cultivator, and after it is so named, the chances are as one to five hundred that it will not prove equal to some of the old sorts, viz. Lou-

is XVI., Catafalque, Holmes's King, Triumph Royale, Polyphemus, Beinfait, or Abercrombie. But notwithstanding the prospect of success is so remote, many persons may be induced to try the cultivation of the tulip from seed; it may be done in the following manner:—

Having procured some good seed, saved from breeders having the bottom of the petals of a pure white, and all the other qualities of a first rate flower, as it regards size, form, &c., prepare a bed of good sandy loam, raised about two inches above the walk; in October, place the seed on the top of the bed, in rows an inch apart, and the same distance apart in the rows; cover the seed about half an inch deep with soil, passing it through a sieve. The bed should be protected against frost, with leaves, sea-weed, or other light substance. In the spring the covering should be removed; the plants will appear above ground in April; at first they very much resemble onions, and come up in the same manner, with their heads bending. The first year the root (or bulb) will attain the size of a pea. The two next seasons it will increase considerably. The plants should always be kept free from weeds. As soon as the leaves decay, which will be in June, clear them off from the top of the bed, and cover it with about half an inch of fresh good light soil; about the middle of September, repeat this top-dressing, and, as winter comes on, cover them up as before stated, and treat them in the same manner, by top-dressing in June and September, until after the third vegetation, when the bulb should be taken up in June or July, and replanted in good fresh soil early in September, about three inches deep, and three inches apart; continue to treat them in this manner until they bloom, which they will do, some of them in the fifth, and others in the sixth and seventh year from the time the seed was sown. Such of the plants as have well shaped petals, a good cup, and all the other properties necessary to constitute a first rate flower, when broken, should be retained, and treated as the other large bulbs; planting them every year in new soil, until they fully develop their colors. Those with pointed petals, and other deformities, should be thrown away. Immediately after the bloom, the seed vessels should be cut off, in order to give strength to the bulb. As the offsets of the tulip always reproduce a plant similar to that of the parent, they are always rejected during the years which precede their complete development.

Purchasers of tulips often select extra large bulbs, and thus

defeat the object they have in view—a fine bloom—as those of huge size often produce imperfect flowers; while, if those of moderate size had been selected, the bloom would have been fine. The only safe guide, however, in the choice of bulbs, is experience.

CHARACTER OF A FINE TULIP.

The properties of a fine variegated tulip, according to the best modern florists, are thus described:—The stem should be about thirty inches high, strong, and upright. The flowers should be large, composed of six petals, proceeding a little horizontally at first, and then turning upwards, so as to form an almost perfect cup, with a round bottom rather wider at the top. The three outer petals should be somewhat larger than the three inner ones, and broader at the base; all the petals should have the edges perfectly entire; the top of each should be broad and well rounded; the ground color at the bottom of the cup should be clear white or yellow, and the various rich stripes, which form the principal ornament of a fine flower, should be regular, bold, and distinct on the margin, and terminate in fine broken points, elegantly feathered and pencilled. The centre of the petal should contain one or more bold blotches or stripes, intermixed with several portions of the original color, abruptly broken into many irregular obtuse points. Some florists are of opinion that the central stripes or blotches do not contribute to the beauty of the tulip, unless they be confined to a narrow stripe down the centre, and that they should be perfectly free from any remains of the original color. It is certain that such flowers appear very beautiful and delicate, especially when they have a regular narrow feathering at the edge; but it is unanimously agreed, that the tulip should abound in rich coloring, distributed in a distinct and regular manner throughout the flower, except in the bottom of the cup, which ought indisputably to be of a clear bright white or yellow, free from stain or tinge, in order to constitute a perfect flower.

SELECTION OF SORTS.

I shall conclude my remarks by offering a selection of sorts for a small bed, which may serve, in some degree, as a guide to the amateur in his purchase of the bulbs, and their arrangement in the bed.

In the selection and arrangement of a bed of tulips the cul-

tivator has an ample field to show his skill; in the proportion as good taste in the distribution of the various colors is displayed, will be the success; no rule, therefore, can be laid down, that is not subject to some improvement; but, as a general principle, a bed should consist of an equal number of roses, (ro.,) bybloemens, (byb.,) and bizarres, (biz.,) and should be planted in the following order:—

	First Row.	Second Row.	Third Row.	Fourth Row.	Fifth Row.	Sixth Row.	Seventh Row.
Row 1.	Biz.*	Ro.	Byb.	Biz.	Ro.	Byb.	Biz.
Row 2.	Ro.	Byb.	Biz.	Ro.	Byb.	Biz.	Ro.
Row 3.	Byb.	Biz.	Ro.	Byb.	Biz.	Ro.	Byb.
Row 4.	Biz.	Ro.	Byb.	Biz.	Ro.	Byb.	Biz.

This general principle should be continued throughout the bed, whatever may be its extent. It is in the selection and arrangement of the different varieties, of the three classes, that improvements can be made; and this can only be accomplished as the beauty and habit of the new and various sorts become known to the cultivator, either by cultivation or reputation. Persons, therefore, who wish to cultivate this beautiful flower, would do well to purchase ten rows or more, properly arranged by some well known and experienced florist. With the offsets, and by the purchase of a few new varieties yearly, a bed may be extended to any desirable length; it being customary to grow duplicates of many of the fine sorts, in the best beds. When tulips are purchased in rows, they are usually duplicated in somewhat the following manner, viz:—

[* It may not be inappropriate to add, for the information of some of our readers, that tulips are divided into classes, viz:—

I. *Bizarres*—having yellow grounds, shaded with scarlet, red, or purple.

II. *Bybloemens*—having white grounds, shaded with violet or purple.

III. *Roses*—having white grounds, shaded with rose or cherry red.

IV. *Selfs*.—All plain colors, either yellow, white, red, or purple, the two latter being termed breeders.

Mr. Walker does not notice selfs in the arrangement of his bed above, though he enumerates two in his selection for a bed of ten rows. They may occasionally be introduced in the place of the others; and when they are *first rate* flowers, with good shaped cups and clean colors, particularly the yellow, they make a pleasing contrast, and add to the variety of the bed.—*Ed.*]

In a bed of 10 rows, 70 bulbs contain 50 varieties and 10 duplicates.

"	20	"	140	"	"	100	"	40	"
"	30	"	210	"	"	150	"	60	"
"	40	"	280	"	"	200	"	80	"
"	50	"	350	"	"	250	"	100	"
"	100	"	700	"	"	350 to 400	"	300	"

A bed of one hundred rows and seven hundred bulbs, containing three hundred and fifty to four hundred varieties, judiciously selected and well arranged, will fill the eye, and produce as brilliant a display as a greater number.

In the selection of a bed of ten rows, the following varieties and arrangement would constitute a good beginning:—

FIRST ROW.

1. Alfred Biz.
2. Athalia Ro.
3. Duchess of Wellington Byb.
4. George IV. (Page's) Biz.
5. Amadis Ro.
6. Imperatrice de Maroc Byb.
7. Bernadotte Biz.

SECOND ROW.

1. Vesta Ro.
2. Alcon Byb.
3. Demetrius Biz.
4. Compte de Vergennes Ro.
5. Archbishop of Canterbury Byb.
6. Captain White Biz.
7. Cerise a belle forme Ro.

THIRD ROW.

1. Adelaide Byb.
2. Capt. Marryatt, (Neale's) Biz.
3. Thalestrus Ro.
4. Baguett Primo Byb.
5. Sir Francis Burdett Biz.
6. Comet, (Strong's) Ro.
7. Downton's Violet Byb.

FOURTH ROW.

1. Emperor of Russia Biz.
2. Hebe Ro.
3. Holmes's King Byb.
4. Sir John Moore Biz.
5. La Van Dyke Ro.
6. Bugbee's Queen Byb.
7. Asteria Biz.

FIFTH ROW.

1. Bru de Noir Primo Ro.
2. Reine des Tulipes Byb.
3. Perfection, (Strong's) Biz.
4. Domingo Ro.
5. Acapulca Byb.
6. Archduke Charles Biz.
7. Cerise Blanche Ro.

SIXTH ROW.

1. Bearer's Beauty Byb.
2. Pomona, (Neale's) Biz.
3. White Flag White.
4. Ambassadeur d'Hollande Byb.
5. Marquis of Lansdowne Biz.
6. Manteau Ducal Ro.
7. Virginal Byb.

SEVENTH ROW.

1. Roi de Navarre Biz.
2. Triumphe Royale Ro.
3. Roi de Siam Byb.
4. Commander in Chief Biz.
5. Merroilleuse Ro.
6. Reine d' Egypte Byb.
7. Globe Superbe Biz.

EIGHTH ROW.

1. Maria Ro.
2. Mirabelle Lemon.
3. Wildbore's Golden Fleece Biz.
4. Gen. Washington, (Neale's) Ro.
5. Rubens Byb.
6. San Josef Biz.
7. Ponceau Unique Ro.

NINTH ROW.

1. Winiford, (Walker's) Byb.
2. Darius Biz.
3. Comptess de Marson Ro.
4. Violet triumpante Byb.
5. Charles X., (Strong's) Biz.
6. Reine des Roses Ro.
7. Roi de Borneo Byb.

TENTH ROW.

1. Superbissima Biz.
2. Beaurepaire Ro.
3. Incomparable, (Wallis's) Biz.
4. Leopoldina Biz.
5. Bathsheba Ro.
6. Belle Actrice Byb.
7. Pont d'Arcole Biz.

Some few years ago, a fine bed of tulips cost a large sum of money, as they were then purchased at so much per bulb, at the catalogue prices; but by the present arrangement, of selling the bulbs in beds of from ten to one hundred rows, in order for planting, and in assortments of from twenty-five to three hundred varieties, ranging in price from fifteen to thirty cents each, and in fine mixtures at a still lower rate, the cultivation of this plant is on the increase, and will continue to increase, until every lover of flowers has a bed of tulips.

Roxbury, April 1, 1841.

ART. IV. *On gathering Asparagus.* By O.

In all the books of gardening which I have seen, the direction for gathering asparagus has always been to cut it several inches below the surface of the ground, as soon as the stalk has advanced a few inches above it. The asparagus generally brought to market is cut in this way, the upper half being green and tender when cooked, the lower half white, tough, and uneatable. The experience of many years has taught me that it is far better to let the asparagus grow to the height of ten inches, or a foot, and then to gather it by breaking with the fingers, as low down as it is tender and breaks easily, which, when the weather has been warm, is generally from six to ten inches. Asparagus, thus gathered, will be found to be much finer, the whole being tender and eatable, the produce much greater, and the process attended with no disadvantage whatever. Asparagus even two feet high, will be found fit to gather in this manner, if at any time it has outgrown the consumption, or escaped attention, which indeed was the occasion on which this new method of gathering occurred to me. I have since always practised it. Let those who are fond of asparagus give it but one trial, and they will never again resort to the old system.

O.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Massachusetts Horticultural Society.*

Saturday, Feb. 15, 1841.—An adjourned meeting from Jan. 30,—the President in the chair.

The Committee on Finance presented their report, which was read and accepted, and upon motion of some member, voted that it be deposited in the trunk belonging to the Society.

The chairman of the committee appointed to consider the subject of awarding medals, &c., in the place of money, made a further report, which, after discussion, the further consideration of, was postponed to the adjourned meeting.

On motion of C. M. Hovey, it was voted, that the committee who have under revision the constitution and bye-laws of the Society, report a bye-law giving a compensation per annum to the treasurer of the Society. Meeting dissolved.

March 6.—A stated meeting of the Society was held this day, agreeably to the constitution,—the President in the chair.

The committee appointed to revise the constitution and bye-laws submitted their report. It was voted that it be taken up and read in sections, for acceptance, which having been duly performed, it was referred to the next stated meeting for final action, agreeably to the provisions of the constitution.

Gen. Wm. Henry Harrison was elected an honorary member of the Society.

H. W. Dutton, of Boston, and Dr. John Green, of Worcester, were admitted subscription members. Adjourned four weeks, to April 3d.

April 3.—A meeting, agreeably to adjournment, from March 6th,—the President in the chair.

It was voted that the thanks of the Society be presented to M. Vilmorin, of Paris, for a copy of the *Bon Jardinier*, for 1841.

The thanks of the Society were also voted to M. Tripet le Blanc, of Paris, for a liberal donation of seeds, and to Mr. W. Kenrick, of Newton, Mass., for his attention to the interests of the Society, while in Europe, and transmitting seeds from the gentleman above named.

The President and Recording and Corresponding Secretaries were appointed a committee for the distribution of the seeds.

The numbers of Audubon's *Birds of America*, and the *Iconography of the Camellia*, by the Abbe Berlése, were referred to the care of the library committee.

M. Tripet le Blanc, of Paris, was admitted a corresponding member of the Society.

Dr. J. S. Butler was admitted a subscription member of the Society.

Adjourned one week to April 10.

April 10.—Adjourned from the 3d,—the President in the chair.

It was voted that the seeds presented to the Society by M. Tripet le Blanc, of Paris, be distributed on Saturday, the 17th.

The Executive Committee were instructed not to receive any reports of committees awarding premiums for the past year, after the 24th of April. The committee appointed to consider the expediency of awarding the premiums offered by the Society, in medals or plate, in the place of money, asked to be discharged from any further attention to the subject, for the present, which was granted. The meeting was then adjourned two weeks, to April 24th.

April 24.—The meeting held to-day was an adjournment from the 10th,—the President in the chair.

The Executive Committee presented the reports of the several committees awarding the premiums for the past year, which were ordered to be published, according to the annual custom of the society. The meeting was then adjourned two weeks, to May 8th.

[Owing to the crowded state of our pages, we are obliged to defer the reports till our next.]

HORTICULTURAL MEMORANDA

FOR MAY.

FRUIT DEPARTMENT.

Grape Vines will now be setting their fruit. Give an abundance of air, and keep the vines free from superfluous shoots. Syringe in fine weather, and as soon as the berries are as large as peas, thin them out.

Strawberry beds may be made during this month, with perfect success. Too early planting is injudicious. Top-dress and clean up old beds.

Raspberries may yet be planted. Dig and clear up the earth between the rows, and stake the plants.

Grafting may yet be performed, if not all completed.

Currant and gooseberry bushes should be pruned, if not yet done.

FLOWER DEPARTMENT.

Dahlias will now be objects of more interest, as the season for planting out arrives. If the roots have been started in the house, they should now be allowed plenty of air, to prevent their being drawn up weakly. Plant out about the 20th of the month for early flowering, and later for a succession.

Tulips will now be advancing rapidly. They should be sheltered from heavy rains; but it is unnecessary for us to say more here, as a reference to Mr. Walker's excellent article in the present number, will give all the information that can be wanted.

Camellias will now have nearly completed their growth. Syringe often, and keep them well watered at the roots, and they will make fine buds.

Cactuses will now be flowering, and should be watered freely.

Amarylises, tiger flowers, tuberoses, gladioluses, &c. may be planted in the open border the latter part of the month.

Annuals should be sown about the 20th, excepting the hardy kinds, which may be planted immediately. Balsams, China asters, globes, stocks, and other tender sorts, may be brought forward in pots, in a frame or hot-bed, as it would not do to plant in the open air till June.

Verbenas may be turned out into the open ground the latter part of the month.

Herbaceous plants, pæonies, &c. may yet be removed with perfect safety.

Ericas should be shaded from the hot sun, if standing in the greenhouse: it will be best to remove them to a frame facing the north, particularly the young plants. Cuttings put in in March will be rooted now sufficiently to pot off.

Oxalises, of all the winter flowering kinds, will be done blooming, and should not be watered.

Erythrina crista galli roots may be planted out in the border the latter part of the month.

Pansies raised in pots, in the frame or greenhouse, should be transplanted into beds in the open air.

Roses, of all the tender kinds, may be removed to the border, where they will flower abundantly all summer, and make large plants for another year.

THE MAGAZINE

OF

HORTICULTURE.

JUNE, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *On the advance of Spring in the eastern part of Massachusetts.* By WILLIAM OAKES, Esq.

ALL nature rejoices in the approach of spring, and we see with peculiar pleasure the well known indications of its advance and progress, the appearance and the singing of birds, the music of the frogs, the spreading green of the grass, and the leafing and flowering of trees and plants. Among all these, the flowering of plants and trees affords the most obvious and certain evidences of the progress of the season. Having for many years observed with care the earliest flowering of many of the native and cultivated species, I have thought that a careful abstract of the results, with accompanying observations, would be interesting to the readers of the Magazine, and especially at the present season, "the coldest and most backward within the memory of man." For want of some fixed standard, we often merely compare the earliness of one season with that of the next preceding, and thus arrive at very uncertain or false conclusions.

The time of the *earliest* flowering, in the most favorable situations, affords the only obvious and certain standard of comparison between one season and another. The time when a plant is generally in full flower, or in height of flowering, is very much a matter of opinion, as to which different persons would greatly vary in their estimates, according to their differ-

ent observation and experience. But where the same plants are observed in successive years in the same situation at their earliest flowering, there is scarcely room for any thing indefinite or uncertain. I may mention in this place, that the exact time of earliest flowering is when the pollen or dust of the anthers begins to be shed.

The most favorable situations for early flowering are steep rocky cliffs facing the south. Ordinary favorable situations are declivities and banks of rather light and not too moist soil, facing the south and south-east, and especially the latter, as they are thus sheltered from the cold north-west winds. In wet clay soil, vegetation is always backward, especially for plants which flower near the surface; and I have observed that in the cold clay soil of Argilla district, in Ipswich, even the common cultivated willow flowers three or four days later than in the light soils of the centre of the town.

The observations upon which the following tables and statements are founded, were made in Ipswich, Mass., which is about twenty-five miles north-east from Boston, in lat. $42^{\circ} 41'$, and in lon. $70^{\circ} 50'$ west from London. The places of observation are near the centre of the town, in rather light soil, and from ten to forty feet above the level of the sea, from which they are distant about three miles. Though there are no high rocky cliffs facing the south, yet many of them are warm, sheltered, and decidedly favorable. According to my observations at several times, the season at Ipswich is two or three days later than in the towns of warm soil adjoining Boston on the south and south-west, and scarcely later at all than in the towns of clay soil on the east of Boston. In Salem, Mass., ten miles south-west of Ipswich, vegetation is probably about a day earlier than in Ipswich. About the city of New York the spring is generally several days, and sometimes even a week earlier than about Boston. At Springfield, Mass., it is nearly the same as at Boston, but this season it is much earlier, as the newspapers mention that the cherry trees began to flower there as early as May 12th.

When cold easterly winds prevail greatly on the sea-coast, but are not sufficiently violent to extend into the country, the season is sometimes more advanced there at the last of May than in Boston, and that even in places situated sixty or seventy miles to the north-west of that city.

It is a somewhat curious fact, that while the flowers of

spring are weeks and even months later in the north of New England than the same species in the south, yet the autumnal plants in the north flower earlier than the same species in the south of New England. At Lubec, Maine, on the 23d of July, 1828, I found *Viburnum cassinoides*, *V. pyrifolium* Auct., in height of flower in the woods, (which is generally in height, about Ipswich, in the middle of June,) and also, at the same time, *Prenánthes álba* and *Aster spectábilis* in flower, which do not generally begin to flower, in the eastern part of Massachusetts, until August, or later.

The following table is computed from the observations of sixteen successive years, from 1825 to 1840, inclusive, embracing several very early, very late, and middling springs, all which appear, on the whole, to balance each other.

1831, exceeding early throughout.	1835, '37, '38, exceedingly late throughout.
'25, '27, '30, very early.	'29, '32, '34, '36, late.
'28, '33, '39, rather early.	'26, rather late.
'40, very early in the beginning of March; late in the beginning of April; exceedingly early in the beginning of May; then cold again the last of May.	

It is well known that the late Hon. John Lowell, whose memory will be ever dear to the horticulturalist, as well as to all the lovers of public spirit, benevolence, and goodness, for many years kept a journal of the earliest flowering of the cultivated fruit trees, abstracts from which he occasionally published in the *New England Farmer*. It is greatly to be wished that this journal may be published, as from the long course of years over which it extends, as well as from the well known accuracy of the observer, it would probably furnish more correct results than any observations during a shorter period.

[It would give us great pleasure to publish an abstract of Mr. Lowell's journal, could it be obtained, in our pages: it would be a most interesting paper.—Ed.]

The mean in the table is the mean of all the years. The extremes include also the year 1841. The mean of the two

extremes generally approaches very near to the mean of all the years.

TABLE I.

NAMES OF SPECIES.	TIMES OF BEGINNING TO FLOWER IN THE MOST FAVORABLE SITUATIONS.		
	Mean.	Earliest.	Latest.
Common American Alder, <i>Alnus serrulata</i> .	March 22.	Feb. 21, 1828	Ap. 8, 1829
Earliest Wild Swamp Willow, <i>Salix conferta</i> . <i>S. eriocarpa</i> Bigelow.	April 4.	Mar. 26, 1828	Ap. 17, 1829
Red Swamp Maple, <i>Acer rubrum</i> .	April 15.	Ap. 1, 1828	Ap. 22, 1832
Rue-leaved Anemone, <i>Anemone thalictroides</i> .	April 21.	Ap. 8, 1827	May 3, 1841
Common Houstonia, <i>Houstonia cœrulea</i> .			
Field Horsetail, <i>Equisetum arvense</i> .			
Early Cudweed, <i>Gnaphalium plantaginum</i> .			
Earliest Sedge, <i>Carex varia</i> Auct.			
Meadow Cowslip, <i>Caltha palustris</i> .	April 22.	Ap. 8, 1827	May 3, 1841
Early Violet, <i>Viola ovata</i> .	April 23.	Ap. 11, 1827	May 3, 1841
Wood Anemone, <i>Anemone nemorosa</i> .	April 24.	Ap. 11, 1827	May 4, 1841
Early Potentilla, or Five Finger, <i>Potentilla canadensis</i> .			
Dog's Tooth Violet, <i>Erythronium americanum</i> .	April 26.	Ap. 14, 1827	May 3, 1841
Dandelion, <i>Leontodon taraxacum</i> .			
Juneberry or Shad Flower, <i>Pyrus botrydium</i> .	May 5.	Ap. 25, 1840	May 19, 1838
Common cultivated English Cherry.	May 7.	Ap. 26, 1840	May 20, 1837
Plum tree—Prince's Imperial Gage.			
Pear tree, <i>Pyrus communis</i> .	May 12.	May 1, 1830	May 21, 1837
Apple tree, <i>Pyrus Malus</i> .	May 14.	May 2, 1830	May 23, 1837

Besides the plants in the above table, there are many others which are not so well fitted for comparison, or which I have not observed so regularly, or for so long a time: some of these I have placed in another table.

The common Skunk Cabbage, *Symplocárus fœtidus*, is the first plant which flowers in spring in New England. It sends up its green and purple spathes, which are rolled in at the sides and pointed at the tip, sometimes even in winter, when, for a few days, the thermometer rises to 50 and 55°. I have observed its earliest flowering every year, for many years, in the same situation in Ipswich, but in consequence of its flowering sometimes in winter, it is impossible to estimate the proper mean time of its flowering. In computing the mean of this and of *A'lus serrulàta*, I have excluded the year in which they flowered in February.

Anemône hepática, Earliest anemone, or "Noble liverwort," is the earliest flower that has any pretensions to beauty: it is scarce in Ipswich, and not within convenient reach for observation.

The Wild Columbine, *Aquilègia canadénsis*, is not common in Ipswich; on the rocky cliffs about Salem it appears to flower a few days after the dandelion.

The White Maple, *Acer dasycárum*, on the banks of Ipswich river, appears, from observations in an early and a late season, to begin to flower at the same time as the alder.

The common peach tree varies much according to the different varieties, and perhaps according to its condition the preceding summer and winter. Some trees generally flower before the cherry, and others later. On the whole, it is not so fit for comparison as some other trees.

The Buffalo berry, *Shephérdia argétea*, now frequently cultivated, appears to be an excellent tree for this purpose, flowering very regularly and abundantly every year. It seems to flower a few days after the red maple.

The Golden currant, often cultivated, flowers about the same day as the cherry.

The common quince tree, and the common barberry, flowers generally the last week in May, but my observations of their flowering have been limited.

The common Wild Black Cherry, *Prùnus virginiana Mich.*, begins to flower about the first of June.

TABLE II.

	Mean time of beginning to flower, in the most favorable situations.
Skunk Cabbage, <i>Symplocarpus foetidus</i> . } Earliest, Feb. 20, 1828. Latest, Ap. 2, 1836 }	March 14.
Common American Hazel, <i>Corylus americana</i>	March 30.
Earliest Anemone, <i>Anemone hepatica</i>	April 1.
American Aspen, <i>Populus tremuloides</i>	April 5.
Single sweet-scented Garden Violet, <i>Viola odorata</i>	April 5.
Common American Elm, <i>Ulmus americana</i>	April 9.
Blood root, <i>Sanguinaria canadensis</i>	April 18.
Early Saxifrage, <i>Saxifraga virginensis</i>	April 19.
Sweet Fern, <i>Comptonia asplenifolia</i>	April 27.
Black Birch, <i>Betula lenta</i>	April 29.
Early dwarf garden Iris	April 31.
Early white Violet, <i>Viola blanda</i>	May 2.
<i>Viola cucullata</i> and <i>Muhlenbergii</i>	May 5.
<i>Viola pedata</i>	May 7.
Early Bellwort, <i>Uvularia sessilifolia</i>	May 8.
Poplar-leaved Birch, <i>Betula populifolia</i>	May 11.
Sassafras, <i>Laurus sassafras</i>	May 16.
Choke Cherry, <i>Prunus obovata</i> Bigelow	May 27.

The flowering of plants will not accord very exactly with the mean of the thermometer for the several weeks and months of spring. The common native, and many of the cultivated herbaceous plants, will advance steadily though slowly, in a moderate or cool temperature, especially if the ground is heated by the direct rays of the sun; while many trees and some cultivated plants, such as Indian corn, beans, cucumbers, &c., will scarcely grow at all unless the weather is quite warm, and in a few hot days they will make more progress than in as many weeks of cool weather.

Backward springs are inconvenient to the farmer, especially when they are wet as well as cold, as they generally are. They greatly delay the ploughing of the ground and the sowing of seed, and force the work of the season into a short period of warm weather, near the end of it. They are also justly unwelcome to all, and especially to the sick and the invalid, being doubtless unfavorable to health, while they subtract a portion of warm weather from the warm season, which is never long enough in this climate. But it does not appear that they exert any unfavorable influence on the fruit or on the crops.

Constant rains, at the period of flowering, are very injurious to fruit, as they wash off the fertilizing pollen or dust, and thus prevent the fruit from setting. But this is as likely to happen at an early season as at a late one. Scarcely any of the crops commonly cultivated in this country are injured by a cold spring or a cold summer, except Indian corn, and this depends much more upon the heat of July and August, than upon the earliness of the spring.

Neither does it appear that a cold and backward spring is generally the signal of a cold and unfavorable summer.

The cold summer of 1836 was preceded by a spring which was backward at the beginning, then very forward until the 20th of May, when a cold easterly wind and fog came on, which lasted for twelve days, with only some intervals of fair weather of a few hour's duration, and with no change of wind.

The spring of 1830 was very early in the beginning, and became exceedingly early during its progress, until after the flowering of the apple tree; but in the month of June and the first half of July the season was exceedingly cold and backward.

In 1837, the whole season, both spring and summer, was cold and backward throughout.

In 1839, the season was rather early, but was the most regular throughout of any season I have known.

On the six days following the 15th of Feb. 1828, the thermometer rose to 52°, 50°, 50°, 57°, 52°, 52°, on each of the days in succession, according to the record which Nathaniel Lord, Jr. Esq., of Ipswich, has kindly furnished me. These days were generally fair, and the nights mostly without frost. On the 21st the common alder began to flower.

At Medfield, Mass., twenty miles south-west of Boston, in 1820, the thermometer rose to 68°, 72°, and 70°, on the successive days of March 24, 25, and 26. On the morning of the 30th it fell to 8°.

In 1833, on the 29th of April, my Kendall's thermometer, in a shady and airy situation, rose to 85°, while Mr. Lord's thermometer, also in the shade, rose to 90°. The newspapers stated that it stood at 85° in the shade, the same day, at Montreal in Canada.

In 1826, on the successive days of May 13, 14, 15, 16, and 17, Mr. Lord's thermometer rose to 88°, 84°, 96°, 97°, and 92°. The nights were also very hot, and the whole five days nearly as hot as the hottest summer days known.

On the 1st of May, 1837, with a bright sun shining nearly all day, the thermometer only rose to 40°, and it scarcely thawed in the shade at any time during the day. At sunset the thermometer was at 28°, and the ground frozen stiff. In the morning of the 2d the ground was frozen several inches, water frozen an inch thick or more, and the thermometer stood at 26°.

The present spring has been as cold and backward as those of 1835, 1837, and 1838, and certainly more severe and unpleasant than any within my remembrance. March was very cold, with frequent snows, and its last days as severe as its first. April has been very cold, with little clear weather, and with frequent and abundant rain and some late snows. May has been cold almost throughout, with one snow on the 3d, and with very frequent and often abundant and cold rains. The wind from no quarter has brought fair weather for more than a day or two at a time, and for a week or more past, the rains have been brought by the *west* wind, and the clear weather by the *east*. The Skunk Cabbage began to flower March 20th: *Viola odorata*, April 9th: the Dandelion, April 30th: *Houstonia*, May 3d: the Dog's Tooth Violet, May 4th: the Wood Anemone, May 5th: the first Asparagus, from a new bed and very warm situation, May 12th: one of my Peach trees opened a flower or two, May 15th: the Plum and the Cherry begin to flower to-day, May 20th.

The Pear and Apple, unless the three next days are quite warm, will open even later than in 1837. According to the newspapers, the season has been excessively cold and backward from Canada to Virginia.

ART. II. *Notice of some Cyperaceæ of our vicinity.* By
EDWARD TUCKERMAN, Jr., Resident Graduate, Cambridge.

THE genus *Carex* is one of great extent, and has a vast number of species. Of those which belong to the flora of Boston, the more remarkable forms are described by Bigelow, and

their common stations given. The following list of species comprehends perhaps the larger part of our more common Carices, and, as the result of the investigations of a single lover of plants, during a few seasons only, may have its proportion of interest with others devoted to the same pursuits. The names and arrangements are, in general, according to Torrey's *Cyperaceæ*.

1. (SUB-G. VIGNA.) *C. exilis* Dew., *C. rosea* Schkuhr, *C. cephaloidea* Dew., *C. sparganioides* Muhl., *C. vulpinoidea* Michx., *C. multiflora* Muhl., *C. paniculata* L. b. *teretiúscula* Wahlenb. (and other forms approaching var. a., and the var. *decomposita*.) *C. siccata* Dew., *C. trispérma* Dew., *C. stellulata* Gooden., *C. canescens* L., *C. scoparia* Schkuhr, *C. lagopodioides* Schkuhr, *C. festucæcea* Schkuhr, *C. straminea* Schkuhr, *C. fænea* Muhl., *C. cæspitosa* Auct. Amer., *C. angustata* Booth, *C. stricta* Gooden., *C. crinita* Lam.

2. (SUB-G. CAREX.) *C. polytrichoides* Muhl., *C. Buxbaumii* Wahlenb., *C. virescens* Muhl., *C. filiformis* L., *C. lanuginosa* Michx., *C. vestita* Willd., *C. pennsylvanica* Lam., *C. pennsylvanica* b. *Muhlenbergii* Gray, *C. Emmónsii* Dew., *C. pubescens* Muhl., *C. considea* Schkuhr, *C. laxiflora* Lam., *C. anceps* Muhl., *C. digitalis* Willd., Torr. Catal. 1840, *C. flexuosa* Muhl., *C. panicea* L., *C. flava* L., *C. folliculata* L., *C. intumescens* Rudge, *C. lupulina* Muhl., *C. tentaculata* Muhl., *C. vullata* Schkuhr, *C. vullata* b. Torr., *C. utriculata* Booth, *C. lacustris* Willd., *C. hystericina* Muhl., *C. pseudo-cyperus* L., *C. pallescens* L.

This list, of forty-eight forms of *Carex*, consists only of such as I have myself found within ten miles of Boston. But it may be increased by the addition of several species, for which I am indebted to other investigators, and, at the best, it can only be regarded as a very imperfect approximation to the probable number. Including the additional forms just referred to, I should estimate the number of our carices, growing in the immediate neighborhood of Boston, at about fifty-six.

Of our other cyperaceous plants, the groups comprehended in the old genus *Scirpus* make up the greater proportion. Of these there are at least fourteen species within the district above mentioned, not including the very remarkable and interesting forms at Tewksbury and Plymouth. *Eleocharis Robbinsii* Oakes, and another *Eleocharis*, as yet undetermined,

are the only species not given in the *Florula Bostoniensis*, with which I am acquainted.

Of *Cyperus* we have seven species, including *C. castaneus* of the *Florula Bostoniensis*. Several more interesting *Cyper*i, detected by Mr. Oakes on our southern islands, and elsewhere in the Commonwealth, may possibly yet be added to our Boston list.

Eriophorum is well represented by *E. alpinum*, (which is abundant in a swamp on the Concord turnpike,) *E. virginicum*, *E. polystachium*, and *E. angustifolium*.

Of *Rhynchospora* we have three species, *R. glomerata*, *R. fusca*, and *R. alba*, the first by far the most common.

Cladium mariscoides Torr., though apparently a very rare plant here, still occurs at Bigelow's station, in Cambridge.

Dulichium spathaceum Pers., is common in wet grounds. There are two, if not three, species of *Scleria* in the State; and a *Fuirena* has been discovered by a Mr. Greene, at Tewksbury, and the same form at Plymouth by Mr. Oakes and myself; but I believe neither of these genera can be included in our Boston catalogue. It is, however, not impossible that both these, and the curious *Psilocarya* of Torrey, also a Plymouth plant, may yet be found nearer Boston.

Cambridge, April 13, 1841.

ART. III. *Some remarks upon the disease called the Yellows, which attacks the Peach tree.* By R. SINCLAIR, Clairmont Nursery, near Baltimore.

I HAVE noticed occasional useful remarks on the best varieties and the culture of fruit trees, in your valuable Magazine; but I have not, as yet, seen any remarks upon the disease called the yellows, which affects the peach tree, or reasons assigned for its prevalence. If the cause could be found out, it might lead to a cure, which would render a lasting benefit to our country. However valuable most other

fruits are, none are equal to the peach in delicious flavor and healthiness, and I should therefore be pleased to see this subject carefully investigated, and the experience of some of your intelligent correspondents communicated through your pages.

And as I have, for about thirty years, occasionally had my attention drawn to this subject, I am willing to throw in my mite of experience. I am fully satisfied that the complaint exists. Some persons say that the worm at the root is the cause of the yellows. I acknowledge that any disorder that destroys the trees will cause the leaves to turn yellow; but the complaint I call the yellows will kill a whole orchard, without any visible wounds, on or before the third or fourth full crop. I think where any neighborhood abounds with peach orchards, it will be nearly impossible to keep clear of the disease.

On planting out young peach trees on the site of a peach nursery, two years after the nursery was removed, and although the ground was in other respects well suited for the growth of the peach tree, yet by the next autumn, many of them were dead, and the balance so sickly that I had them all dug up, and there was no sign of the worm at their roots. From this, and other similar experiments, I think the disease may be generated by planting in or near where a nursery or orchard of peach trees has been, or where the latter is; consequently, where a neighborhood abounds with peach trees, there is danger of its becoming overspread with disease, without greater care than is usually taken to prevent it.

I think I have seen evidences of its being in some degree contagious. Richard Cromwell, the respectable and worthy peach raiser, near Baltimore, has for upwards of thirty years supplied that city with peaches of the best quality, on a large scale. Some time since, when I was walking with Mr. Cromwell through his peach orchard, when the trees were hanging full of ripe fruit, he pointed out a tree that he said had the yellows, having a full crop upon it, at that time worth one dollar per peck, and to me it appeared healthy; but he observed to me, "as soon as I take the fruit from the tree, I shall dig it up, in order to prevent the disease spreading any farther, for I expect the side of the adjoining trees next to it will be affected next season." I had occasion to pass through Mr. Cromwell's orchard the next fruiting time, and the sickly

tree had been dug up, but, as had been predicted, parts of the four neighboring trees were evidently much affected, but only the sides next to the diseased tree, which made it the more striking, and convincing of the contagion, if this is a proper term.

On another occasion, I had a favorite early purple peach, before I had a nursery, that I suspected was partially affected by the yellows, and being desirous of preserving the variety, I cut the healthiest branch I could get, and I had twelve buds inserted in healthy peach stocks, but when they had grown about three feet, they showed the disease so plainly that in order to prevent it from spreading, I pulled up all the trees, and had them burnt.

From these cases, it seems to me the disease may be generated by planting old peach orchards or nurseries too soon after the removal of the old trees, and also by planting too near those already affected with the disease; and if cuttings or scions are taken from diseased trees, their product will be also diseased. I also think the yellows may be communicated to young trees by planting seeds taken from diseased peach trees.

Respectfully your friend,

ROBERT SINCLAIR.

Clairmont Nursery, March 18, 1841.

ART. IV. *The Phloxes as Garden and Parlor plants.*

By J. L. R.

IN a former number of this Magazine, (Vol. II., p. 361,) I made some observations on the beauty and adaptation of the phlox, as a subject of floricultural skill, and offered a hint in the successful treatment of a variety, which at that time fell under my notice. I have been pleased to see that a constant and increasing regard is being manifested towards the genus, which indeed claims such favor. Choice and fine varieties are every year brought before the public eye, and these of

sorts which add to the effect of the flower border. They are, however, from the parentage of two species, viz., *P. paniculata* and *pyramidalis*. An accurate descriptive catalogue of these varieties would not only be very interesting, but instructive, and serve as some guide to the forming of a good collection, which should combine the most striking qualities. To furnish such a catalogue, might perhaps require some study, and particularly an acquaintance with the sorts: but as not a few are from the seed-beds of the florists in this vicinity, and as probably the imported ones are not numerous, some zealous amateur among us may be found competent to the undertaking. Indeed, if I am not mistaken, there is such an one, surrounded with his choice hardy perennials and exquisite flower-gems, in his neat and unique little garden at Roxbury, who may be induced to further this object with his ready pen and able information. Should this friendly hint meet his favorable notice, I anticipate the result of my wishes.

The cross impregnation and partial hybridizing of the phloxes have been most satisfactory in rewarding the necessary care in experiments. What might be the effect of instituting some similar experiments on that dazzling beauty, the annual *Phlox Drummondii*, patience and skill can only determine. To secure a permanent and choice variety of this, is very desirable, and a perennial hybrid of such a partial parentage would be quite a triumph! There are some of its natural seedlings of singular beauty in the collections of our florists; while others probably still more perfect, could be produced through the many curious processes well known to the skilful experimenter.

These humbler phloxes are, by the way, admirably adapted to parlor and in-door cultivation. A sod of *P. subulata* var. *nivea*, in a frozen condition, and another similar piece of *P. stolonifera*, were potted in some good light soil, towards the end of December last, and kept in a room at the average temperature of 55° Fahr. In about eight weeks they began to flower profusely, and formed very pretty objects, requiring no other attention than a plentiful supply of water and as much light and sun as was convenient. When deprived of the direct influence of the sun, a singular effect was produced; the fine rosy crimson of the blossoms of the latter were changed into a variegated purple hue. This little species, the *stolonifera*, is well known in almost every garden, as a desirable spring flower; it is equally capable of gracing with its beauty

the windows of our sitting-rooms in winter. The snowy blossoms of *nivea* are equally attractive. Doubtless *P. ovata* *Listoniana* would do equally as well; and *P. divaricata*, with its beautiful light blue flowers, would be very elegant when growing in so early a season of the year. There can be no reason why all the dwarf sorts may not be so cultivated: and were they arranged, for instance, along the front lights of the common green-house of ordinary temperature, they might furnish a most abundant bloom, to aid in making up bouquets, when flowers are so much needed and often so scarce. Many of the out-door garden flowers are thus peculiarly fitted to add a grace and an effect to the more tender and delicate: but as we see them mingled with hundreds of others, in our flower beds, we are apt to overlook their particular beauty and individual charms. And though they are the hardy children of northern and colder latitudes, yet they mingle well with the sunny beauties of more favored climes, losing nothing by the comparison, and lending their happiest aid. J. L. R.

Chelmsford, April, 1841.

ART. V. *On the cultivation of the Camellia in the Parlor or Drawing-room.* By Dr. J. S. GUNNELL, Washington, D. C.

IN your Magazine for April, 1841, "A Subscriber" asks some information about raising camellias in parlors. I have had about ten years' experience in raising camellias in a common sitting room or parlor, during which time I have tried various plans of cultivation, some to the advantage of the plants, and others to their injury; but the plan that has succeeded best with me is the following:—I had *three benches* or tables, made about *five feet long*, and *three feet three inches wide*, with strips around the edges, so as to be about a third of an inch above the edges of the benches all round, and then common (sawed) laths cut into short pieces, and placed about two inches apart

on the top surface of the benches or tables, so that the water which ran from the flower pots could pass from one part of the benches to another, crossways or lengthways, and pass out at a notch in the edging around the benches spoken of above; by which means the pots would not stand in the water that runs from the pots to the benches.

Those benches I placed far enough from the windows and walls, or partitions, to allow a grown person to pass all around between the windows and wall and benches, and to water and syringe the plants, which made a space of about one and a half or two feet in front and at the ends.

The benches should be of a height in proportion to the windows, so as to let the sun shine on the edge of the top of the benches nearest to the windows. The windows should be made to let down from the top, by which means the plants could have air let in upon them, without a strong current passing through them or upon them. This I consider a very important matter, as a strong draft or current of air is very injurious, both to the vegetable and animal creation.

I first used wood fire, then Lehigh coal in grates, and finally Lehigh coal or anthracite coal in a stove; but I greatly prefer the stove, as it keeps a more uniform heat, creates less dust, and I could frequently keep the passage and partition doors open, to assist in airing the plants.

The plants in rooms should be watered more frequently than in green-houses, and they should be syringed over the tops *every evening*, about sunset, in dry weather, and twice or thrice a week in wet weather. The syringing will not injure the carpet upon the floor, if the water is wiped up immediately after the drip ceases to fall from the leaves: a dark carpet soils less than a light colored one, if not well wiped up.

The camellias that bloom best in parlors are those that have a green calyx or buds; those that have a dark calyx or buds are the most difficult to make flower.

I have bloomed in a parlor, by the above plan, all of the most difficult flowering camellias that are grown in this vicinity, though not so finely as they are bloomed in green-houses; but those that have a green calyx, as before remarked, will bloom nearly as well as in green-houses, and will seed much more freely in a dry heat.

The camellias that I would recommend as the best to flower in parlors are the following:—*Camellia coccinea* or *spléndens*,

Covingtoni, variegata, *Pomponia*, *Pæoniiflora*, *nivalis*, *excelsa*, *Sabini*, *conchiflora alba*, *Derbyana*, *rubricaulis*, *Parksii*, *conchiflora*, *Laura Coates*, (a very superb white seedling, raised by Mr. Joshua Pierce, of this vicinity,) including all that are semi-double, with about fifteen or twenty petals, and that have a green calyx, and all the single varieties.

The plants should have air, by letting down the top sash whenever the weather is mild, or when there is no frost in the atmosphere, for a short time, though it may be cool. The *camellia* requires a great quantity of air: they will bloom in a room where the heat varies from thirty-five to fifty degrees, but will bear a much greater heat and bloom well, and on some occasions they will flower, even though the earth on the top of the pot has been slightly frozen; but extremes, either of heat or cold, are bad for them.

I have had *camellias* bloom finely on the benches, as above, where the sun did not shine on them; but, in such cases, they should have a great quantity of light.

The syringe that I use was bought at the horticultural store of Mr. Landreth, of Philadelphia, and cost about six dollars; it is made of brass, and when properly used, and kept in good order, any individual may syringe the foliage of the plants, and let but little water fall upon the carpet or floor. The wider the benches, the better you can protect the carpet from water. Where a person has but few plants, they might be watered over their tops with a watering pot with a rose on it, by laying each plant on its side, so as to keep from wetting the earth in the pot too much: this could be done in a large tub, or on a kitchen floor.

I generally use water for my plants, both winter and summer, directly from the pump, though probably it would be better if it was warmed to the same temperature of the room, in winter.

As to general watering of the flower pots, I think it best, whenever the top earth begins to get dry, to water well or freely, so that the water will pass to the bottom roots, and repeat the watering when the surface begins to get dry again: when the *camellias* are blooming or growing, they require more watering than at any other time.

The number and size of the benches or tables should be in proportion to the quantity of plants the individual has to winter: they should not be crowded.

In the spring of the year the sun will shine so powerfully as to injure and disfigure the foliage of the camellias by scorching it by its intense rays. In such cases, the window glass should be washed over, (or made dim,) by the application of common whiting and water, or a thin muslin curtain should be hung over the window, to protect the foliage of the plants from the scorching rays of the noon-day sun; though this caution will not generally be necessary, except where the windows are on the south side of the house.

I have cultivated camellias by the above plan, in such a manner as would do credit to most green-houses or their cultivators; I am also led to the conclusion, from experience, that camellias are easier cultivated than most other plants.

If you deem this hasty sketch of sufficient importance, you may publish it in your valuable Magazine.

Respectfully, yours,

J. S. GUNNELL.

Washington, D. C., April, 1841.

ART. VI. *Descriptive account of four new seedling Verbenas.* By WILLIAM HOWELL, Gardener to C. F. Rockwell, Esq., Norwich, Conn.

AGREEABLY to your wish, I send you the following descriptions of four seedling verbenas, which I raised the past year.

Verbena var. Haggerstonii.—Flowers pale lilac, in large corymbs, and at night giving out a delightful fragrance, which can be perceived from that of all the odors of other flowers. The corymbs are finely shaped, and each individual flower of large size. The plant is of a procumbent habit, though rather stiff in its growth, and can, with very little pains, be formed into a bush of several feet high. The leaves are thick, large, and of a very dark green, ovate, lanceolate, obtusely dentate, and slightly pubescent. I have named it in honor of our esteemed friend, Mr. Haggerston, gardener to

J. P. Cushing, Esq., Watertown, whose merits as a gardener, and whose affability and kindness to all lovers of plants who visit Mr. Cushing's residence, are too well known to need any further eulogy, and whose name is well deserving of being attached to so universally cultivated and beautiful a tribe of plants as the verbenas.

Verbena var. *Russellii odorata*.—Flowers rosy pink, with well formed compact umbels. A free flowerer, and in habit and growth much resembling *V. Haggerstonii*. It is well adapted to pot cultivation as well as to the open border, on account of its stiff and compact habit.

It is not so strong and vigorous as the above, but partakes somewhat of the character of its parent, *V. teucrioides*, though inclined to grow taller. The flower stalks are long, and in consequence are well adapted for cutting for bouquets; in this respect it is superior to most of the other varieties.

Although you have named one, of your own raising, in honor of Mr. Russell, I think that a sub-variety which has the additional character of being fragrant, will be no more than a just tribute to the name of a gentleman whose writings in your pages have been so instructive and useful to a great portion of your readers.

Verbena var. *Howellii*.—Flowers light pink; umbels large, well formed, half orbicular, forming a pretty contrast with the flatter umbels of many of the other varieties. The habit and growth of the plant resemble the last described one, *V. Russellii odorata*, with the exception that its leaves are not quite so large, and more finely dentate. The flowers are also sweet scented, thus making, in all, three varieties, highly fragrant.

Verbena var. *densiflora*.—Flowers rich crimson; umbels large, but so flat that the flowers almost form an even surface: each individual flower more than medium size. The plant has a neat trailing habit, flowers very freely, and its joints are so short that it is completely covered with dark green leaves, intermixed with its fine crimson umbels of flowers. I think this variety a most valuable addition to this beautiful tribe of plants.

I have also raised, in addition to these, a number of other seedlings of considerable merit, and I have some yet that have not flowered, from which I expect something good. I have also some seedling geraniums, of which, should they prove handsome kinds, I will give you an account at another opportunity.

W. HOWELL.

Norwich, Conn., March, 1841.

ART. VII. *Observations on the Camellia, with a descriptive account of all the finest varieties which have been introduced, or raised from seed, in this country.* By M. P. WILDER, President of Massachusetts Horticultural Society.

(Continued from Vol. VI., p. 58.)

No. 106. *Camellia japonica* var. *ochroleuca*. Abbe Berlèse *Monographie*.

This splendid camellia was brought out to Germany in 1832, from Japan, by Dr. Van Siebold, with those distinguished favorites, C. var. *Donckelaerii* and *tricolor*, and although the latter are of great merit, they do not detract from the excellence of the present subject. The flower is large, full, and bold, nearly of regular formation, with a peculiar undulating or wavy appearance.

The color is not a true yellow, as its name would indicate, but a white, deeply tinged with this shade of coloring, the intensity of which is much increased by the combination of a few golden anthers at the centre. A foreign correspondent remarks, that, under favorable circumstances, this variety has bloomed with him as dark as the yellow Tea rose.

107. *Camellia* j. var. *tricolor*. Abbe Berlèse *Iconographie*.

A true Japanese variety, imported at the same time, and by the same celebrated botanist, as the foregoing sort. The flower is semi-double, with two rows of petals, and perfect sexual organs. The ground color is white, with distinct and broad stripes of vermilion red. A few days after expansion, these stripes assume two shades of coloring, a light and dark red; from this circumstance the name of the variety has arisen. Desirable for any collection.

108. *Camellia* j. var. *Nicholsii*. French and German *Catalogues*. Abbe Berlèse *Monographie*.

The color and form of the flower resembles the C. var. *rùbra plèna*, but far more regular, larger, thicker, and of a brighter color. It is an abundant bloomer, and a valuable kind.

109. *Camellia* j. var. *King*. Ger. and Fr. *Cat*.

King's Royal. Abbe Berlèse *Icon*.

The Camellia King, or King of the Camellias, was pro-

mulgated to the world under the most extravagant descriptions of its superior excellence, but it has not, I believe, generally answered the expectations of those who possess it: it is, however, a good and desirable variety. My German correspondent remarks, "It is, no doubt, one of the *finest* camellias, but it did not deserve the reputation of its enormous price." The form and color is like eclipse and delicatissima, but much better filled up.

110. *Camellia j. var. nivàlis*. Abbe Berlèse *Monog.* English and Fr. *Cat.*

A large, elegant, pure white flower, double, but not quite full. The foliage strongly resembles the *álba simplici*. It is a strong growing, free blooming variety, and desirable in any collection.

111. *Camellia j. var. álba grandiflora*. Fr. and Ger. *Cat.* Abbe Berlèse *Icon.*

The flower is of irregular formation, after the manner of *C. var. triúmphans*; the size large; the color creamy white. Of considerable merit.

112. *Camellia j. var. conspícua* of Loddiges. English and Ger. *Cat.*

This noble camellia is one of the best acquisitions of the age. The growth of the shrub is strong, and the foliage is majestic. The flower is very large and truly grand, and in form and color bears a strong resemblance to *C. reticulàta*. Should be in every choice collection. The *conspícua* of the French *Catalogues* is quite a different, though a fine variety.

113. *Camellia j. var. Clarissa*. Ger. *Cat.*

A pure, semi-double, white camellia; desirable on account of its different form from other camellias. Free bloomer.

114. *Camellia j. var. elàta*. Fr. and Eng. *Cat.*

A variety of good merit, raised by Mr. Cunningham, of Edinburgh. The flower is of regular formation, and quite perfect; the petals numerous and well arranged; size, medium; color, a violet rose, spotted and shaded with white.

115. *Camellia j. var. gardeniflora*. Ger. *Cat.*

Appears to be the same thing as *C. var. spofforthiàna álba*.

116. *Camellia j. var. Derbyàna*. Abbe Berlèse *Icon.*

In the present subject, we have one of the most noble and

desirable varieties of the genus. The flower is from four to five inches in diameter, of a very bright orange red color, inclining to scarlet. The petals are broad and large, not numerous, but well arranged. This is the first variety figured in the *Iconography of the Camellia*, and appears to be quite different from the C. var. *Derbyana* of our collections.

117. *Camellia j.* var. *Palmer's Perfection*. Ger. Cat.

This is a most admirable variety—the formation exquisite, and well deserves to be called *Perfection*. Size, medium; the color a beautiful light crimson, inclining to violet tint. The petals are quite numerous, imbricated, and arranged with the most perfect symmetry to the very centre. I have not yet been able to ascertain the genealogy of this superb camellia.

118. *Camellia j.* var. *Leeana superba*. Abbe Berlèse *Icon*.

One of the most distinct and elegant varieties in cultivation. The flower is peculiarly bold and showy; the color a brilliant orange red, nearly scarlet, with some faint stripes of white near the centre. The petals are very broad and bold, completely imbricated and cupped, and the whole flower retains this shape for some days after expansion. Worthy of a place in the most choice collections.

119. *Camellia j.* var. *spectabilis maculata* of the French.

In every respect appears to be one and the same thing with C. var. *King*.

120. *Camellia j.* var. *decora*. Abbe Berlèse *Icon*.

Flower double, cherry red, but not very full, with some stamens. Rather above the medium size, with broad thick petals. A bold, showy variety.

121. *Camellia j.* var. *Tamponedna*. Abbe Berlèse *Monog*.

Form irregular, but good; color, cherry red, spotted with white; size, medium.

122. *Camellia j.* var. *Clivedna*. Abbe Berlèse *Icon*.

This camellia is of the loose warratah formation, double, but not quite full. The flower is large, and of a clear rose color. An old and established favorite with those who have grown it. Figured in the *Iconography of the Camellia*.

123. *Camellia j.* var. *philadelphica*. American Cat.

An American variety of undoubted excellence, contesting

the palm with *C. var. elegans*. The form is similar to the last named sort, quite as large, and better filled with petals. The color is somewhat darker, otherwise it might be taken for that *camellia*. Raised from seed some years since, by Mr. J. B. Smith, of Philadelphia. Free bloomer.

124. *Camellia j. var. Alexandrina*.

Flower double, of the loose warratah formation. Color, dark carmine, faintly shaded with white.

125. *Camellia j. var. perfecta*.

} Syn. of *C. var. Alex-*
126. *Camellia j. var. Colviliæ rubra*. } andrina, (No. 124.)

127. *Camellia j. var. Youngii*. Fr. and Ger. *Cat.* Abbe Berlèse *Monog.*

The flower of this variety is quite large, of a carmine rose color; blooms freely, and resembles a little the *C. var. Clivena*.

128. *Camellia j. var. pendula*. Fr. and Ger. *Cat.*

The form of this flower is very regular; the petals numerous, and all arranged in the most perfect order, after the manner of shell work. The color is a dark rose, with violet tint, and frequently marked with white. A desirable variety.

129. *Camellia j. var. Campbellii*. Fr. and Ger. *Cat.*

Flower double, but not full, with some stamens. Form of *C. var. Donckelaeri* and *corrallina*. Color, white ground with rose stripes. Free and early bloomer.

130. *Camellia j. var. Grunelli major*. Ger. *Cat.*

A seedling raised at Frankfort on the Main, Germany. The color is a creamy white, and the flower of the largest size. Form like *C. var. eclipse* and *triumphans*, but fuller, and crowded with petals, forming a spherical ball.

131. *Camellia j. var. Alnüttii superba nova*. Ger. *Cat.*

This noble variety seems to be a relative of the *C. var. Róssii*, but the flower is of a brighter rose color, and frequently spotted with white. Size large. Free in its inflorescence, and persistent.

132. *Camellia j. var. alba londoniensis*. Fr. and Ger. *Cat.*

A fine double white variety, but hardly full; petals large, but not numerous. A free bloomer, and promises to be a large, showy sort, and quite a desirable addition to the tribe.

133. *Caméllia j. var. Hendersónii*. Fr. and Ger. Cat. Abbe Berlèse *Monog.*

Flower of exquisite formation; petals finely rounded and imbricated, like a rose. Medium size. Color, a clear, delicate rose. A desirable and indispensable variety in all good collections.

134. *Caméllia j. var. Cláritas*. Fr. and Ger. Cat. Abbe Berlèse *Monog.*

A semi-double white flower. Appears to have some affinity to *C. var. nivális*, and is a good sort for extensive collections.

Hawthorne Grove, Dorchester, May, 1841.

ART. VIII. *Notices of several new seedling Azaleas, grown by Peter Mackenzie, Philadelphia.* By HENRY B. HIRST.

Azálea Copeii. Mr. Cope's azalea.—A finely cupped flower, of an exquisite light rose color, the three upper petals profusely marked with dark rose. The blooms are exhibited much in the character of the rhododendron. The plant is of vigorous habit, and a profuse bloomer. Foliage dark green. In honor of Mr. Caleb Cope, of Philadelphia.

Azálea Thorburnii. Mr. Thorburn's azalea.—Finely cupped flower, of a rich rose pink, the petals regularly rose-shaped and symmetrical. The blooms in terminal clusters of five flowers, and finely marked with crimson. The foliage is of a dark green, and rough on the under side. A superb variety. Named in honor of George C. Thorburn, Esq., the well known seedsman and florist of New York.

Azálea Campbellii. Mr. Campbell's azalea.—The flower finely cupped, of a brilliant rich rose, with the entire upper petals of violet crimson, marked with intense dark carmine spots, and of the most perfect shape, and in clusters of twelve flowers on the end of each shoot, presenting the appearance of a superb rhododendron. The single flower one half larger

than *phœnicea*. Superb. In honor of Archie Campbell, Esq., of Philadelphia, a gentleman amateur of the highest ability.

Azalea Thorburniana. Miss Thorburn's azalea.—The flower of dark rose, as soft as the glow on the lady's cheek, in honor of whom it is named, of graceful habit and perfect shape; the upper petals profusely blotched with large spots of dark crimson. The whole flower is of strongly marked and exquisite character. The leaves are of a dark green, and ovate form. Very superb.

Azalea Dobsoniana. Miss Dobson's azalea.—The flower finely cupped, of a clear transparent salmon rose, and large size, delicately marked with rosy crimson. Beautiful. In honor of Miss Jane Dobson, of Philadelphia.

Azalea Rowleana. Miss Rowley's azalea.—Blush pink, of extremely fine form, beautifully cupped, and of distinct character; the upper petals richly marked with clear rose. The plant entirely covered with foliage resembling the *phœnicea*. A lovely variety. In honor of Miss Jane Rowley, of Philadelphia.

Azalea Petersonii. Mr. Peterson's azalea.—Faint rosy lilac, the upper (centre) petal only marked with violet purple; the bloom extremely large, and entirely distinct in character. The leaf very large, and of the *phœnicea* appearance, and the plant of uncommonly vigorous growth; although a seedling, in its second year, producing wood over three feet in length.

In honor of Charles I. Peterson, Esq., a gentleman of the highest ability, and a literary writer of much eminence, in Philadelphia.

Azalea Waldiana. Miss Waldie's azalea.—Of a rich pale lilac, in terminal corymbs of four to six blooms; the centre petal only, finely marked with crimson spots. A vigorous growing plant, of the *phœnicea* habit; the bloom two thirds larger. One of the most beautiful of the tribe.

Azalea Hirstii. Mr. Hirst's azalea.—Rich rosy lilac, of beautiful form, and entirely distinct character. The bloom of a rosy violet. The upper (centre only) petal marked with dark carmine of half its length, and distinctly resembles the *pelargonium* Dennis's Perfection. The habit of the plant graceful, with the foliage regularly arranged from the ground upwards.

Azalea Hirstii superba. Mr. Hirst's superb azalea.—Intense scarlet crimson, of the most exquisite form, in large well arranged clusters, with the upper petals richly marked with dark velvety crimson. By far the most distinct, and the darkest colored flower yet known; the *Smithii coccinea* pales into a sickly blush by its side. Magnificent. Of the *Indica* family. The plant more near allied in habit to the *phœnicea*.

Azalea pencillata. Diversified azalea.—Rich blush rose, diversified with shades softening into blush or white, and re-passing again into a darker tint. The centre petal of a fine rosy violet, and the three upper petals faintly marked with dark rose. The blooms are exhibited in clusters. The plant is of the *phœnicea* habit, with the foliage of a light green.

Azalea Garwoodii. Mr. Garwood's azalea.—The flower of bright rose, in terminal clusters of five or six, and distinctly marked with bold veins of the same color; the markings, which are of dark crimson, extending over nearly the whole of the centre petal, and the half of those on each side. The flowers extremely large, of the most perfect shape. Splendid. In honor of George M. Garwood, Esq., of Philadelphia.

Azalea Worrallii. Miss Worrall's azalea.—Clear light rose, of fine habit and very perfect shape. The upper petals well marked with bold spots of rich dark rose. The foliage of a light transparent green, much larger than the *phœnicea*, and of the same habit. In honor of Miss Catharine Worrall, of Philadelphia.

Azalea Cassiniana. Mr. Cassin's azalea.—A rich mottled rose, with beautifully shaped petals, the upper of which are heavily marked with dark carmine. The habit of the plant dwarfish and shrubby. The foliage and character like that of *phœnicea*, but more ovate in form. Perfectly distinct. An important variety. In honor of John Cassin, Esq., a naturalist of deep acquirements, of Philadelphia.

Azalea Englishii. Dr. English's azalea.—Splendid dark rose, with the upper petals of a rich violet crimson, and deeply marked with distinct spots of dark purple. The blooms well cupped, and in profuse terminal clusters. Of dwarfish habit. The foliage dark green, and ovate. Superb. In honor of Thomas Dunn English, M. D., of Philadelphia.

H. B. HIRST.

Philadelphia, April, 1841.

ART. IX. *Some further Remarks on the cultivation of the Tulip, and an errata in the communication on the same subject, in the last number, (p. 186.)* By S. WALKER.

BEFORE proceeding further with my remarks on the cultivation of the tulip, I will take this opportunity to correct some errors of the press in my communication upon the same subject, in your last number, (p. 186.)

At p. 186, fourth line in the first paragraph, for "propose," read "preface." Some more important errors, viz. the substitution of the word "rolled" for "raked," occur in another paragraph, which should be corrected, in order that the amateur may not be led into an error in planting. It is not intended to roll the bed in any case, but merely to rake it, to give it a smooth and workmanlike appearance. Page 188, third and thirteenth line, for "rolled," read "raked;" p. 189, fifth line, for "rolled" read "raked."*

Hardiness of the Tulip.—At page 192, in my former communication, under the head of "Remarks," I stated that "the tulip is, in my opinion, a very hardy plant, and not subject to injury by our most severe winters, when planted in a suitable soil, and in a proper location." Since the above opinion was written, I have examined my tulip beds, and find the bed which was left entirely *uncovered*, during the whole of the past winter, to be in a much better state than two other beds which I covered with care, and paid them every attention which I thought necessary to protect them from extreme cold. The protection did them an injury—the tulip is a hardy bulb.

Yours, &c.

S. WALKER.

Roxbury, May 23, 1841.

* We are sorry that these errors should have occurred in Mr. Walker's communication: but, owing to circumstances beyond our control, we did not have the opportunity to send the author a proof. Our readers will therefore, in addition to the above, find the following *errata*:—P. 191, first line after the word "period" add "in which;" it will then read—"this is the period in which the florist," &c. P. 197, first line, for "10" duplicates, read "20." Same page, in the selection of a bed of ten rows, No. 1, in the fifth row, first word, for "Bru," read "Ben." No. 5, in the seventh row, for "Merrielleuse," read "Merveilleuse."—*Ed.*

REVIEWS.

ART. I. *The Herbaceous Plants of Massachusetts, &c. &c.* pp. 268. *Being a Report published agreeably to an order of the Legislature.* By the Commissioners of the Zoological and Botanical Survey of the State. Cambridge, &c. 1840.

THE author of this Report is the "Rev. Chester Dewey, Prof. of Chemistry, Botany, and Natural Philosophy in the Berkshire Medical Institution at Pittsfield." Two individuals were selected to report on the Botany of the State, and that part of our flora, pertaining to the herbaceous flowering plants, was allotted to our author. Regarding the justice he has done to this interesting subject, a perusal of the paper can only determine: his ability in the requisite means is manifest by "a previous attention, for years, to the examination of our plants."

We learn that the Report was made on the basis of a "Catalogue of Plants, growing without cultivation in the Commonwealth, arranged according to the natural method of Lindley, as published and applied to the Plants of this country, by Prof. Torrey, of New York," furnished "by Prof. Hitchcock, in the Geology of the State," &c. P. 6.

Of the plan, method, and object of the present Report,—

"It has been supposed, too, that while the objects to be attained by the legislature in the survey required a systematic arrangement in the outline, it was important that the descriptions should be popular in their character, easy to be apprehended, and not technical in their language, and that notice should be taken of facts of importance or of interest in any respect. The *botanical* name, with the usual abbreviation of the author's name, has been given, but without the synonymes; because one name would direct the botanist to the plant intended, and more names, and even all the synonymes, would offer no advantage to the common reader."

"The *cultivated* plants have been introduced, whether raised in the garden or on the farm, and many of the parlor, whether designed for ornament, food, clothing, or art, or manufacture. All these were supposed to have been intended in the survey of vegetable life in the Commonwealth."—P. 7:

It is to be hoped, however, that these cultivated plants mentioned by Mr. Dewey will not be considered any approximation to the actual number. Nearly all that we have noticed in the Report are of the more common kinds, and of sorts, too, most familiar, with a few exceptions, to the merest tyro in gardening. Great and signal injustice would be committed on our farmers, gardeners, and florists, were the Report to be taken as a specimen of the progress of vegiculture in our State. Thus the natural order Ranunculaceæ closes with some of these cultivated and ornamental plants.

"Five or six species" (of *Delphinium*) "are cultivated in the gardens for their beauty. The *bee larkspur* bears a flower which has, at a little distance, a striking resemblance to a bee. Some of these species are not found in common gardens, and have not been introduced many years." That garden, we opine, must be indeed common, or rather *uncommon*, which does not boast of five or six species of larkspur.

"Again,—*Pæonia officinalis* L. is the well known pæony of our gardens. As the flower becomes double, or the stamens change into petals by cultivation, it is admired for its large head of petals, as well as for its fine foliage. * * * Many of the species are splendid ornaments of the greenhouse."—P. 29. As the number of the species are not mentioned which are under cultivation in Massachusetts, we are at a loss to determine how many are seen in the greenhouse. We think it would have been more accurate, too, to say, that the double or multiplex variety of *Pæonia officinalis* is the well known one of the garden; for the single or original sort is esteemed a rarity among amateur florists.

The following, on the anemone, seems rather obscure for "popular description:" "Three species; two *nemorosa* D. C., and *thalictroides* L., small, delicate, beautiful."—p. 23.

The cotton plant, although an ornament and curiosity at the North, in gardens, "belongs not, in its history, to the botany of Massachusetts!"—p. 44.

Six species and varieties of *Brassica*, all told, constitute the report on that valuable genus; these are kale, turnip, ruta bage, cabbage, cauliflower, and brocoli. The details are probably given in the "Agricultural Survey."

Mr. Dewey has left to his coadjutor, G. B. Emerson, Esq., the *trees and shrubs*. But notwithstanding he considers *spirea* as woody, and therefore no concern of his in its species,

he sets forth in our flora a catalogue of *roses*, which we always supposed were woody, and in that sense *shrubs*. And on this head, our readers must be delighted to understand that "several species of the rose have been introduced, and are found in many gardens and yards."—p. 55.

A white fruited variety of strawberry "is abundant in the fields in the east part of Berkshire County," and "sought for, from its sweetness, though it has not quite so fine a flavor, or rather, has a weaker flavor than the common *red* strawberry. The leaves are somewhat villous, and the plant may be a permanent variety of *F. virginiana*."—p. 59. Could some of these plants be forwarded to our gardens in this vicinity, their merits would be fully tested, and their capability for culture ascertained.

Under the head of *Geranium*, as a genus, of which three native species are properly mentioned, we learn that "many species of geranium are cultivated for ornament, as they have fine flowers and foliage. Many are beautiful plants for the parlor." Our parlor culturists and other florists are in the habit of cultivating the varieties and species of *pelargonium*, whose flowers, we believe, exceed those of *geranium*. But this may be only a botanical nicety; yet distinctness in language is no detriment to a botanical report. Errors calculated to mislead, however trifling they may seem individually, should be carefully avoided; e. g., *Aster phlogifolius*, we think, defines a species of aster with the *leaves* of a *phlox*, rather than one with "red or flame-colored petals, whence its name."—p. 135.

For whose benefit and edification, whether the botanist's or that of the common reader, the following is given, we do not decide.

"In adverting to the use of the *grasses* for the food of man, it should be remarked that the potato, buckwheat, yams, manihot, batatas, bananas, bread fruit, several palms, and some esculent species of *arum*, by means of which so many millions are supported, belong to other orders of the vegetable kingdom. The same remark should be made in respect to the pea, bean, cabbage, turnip, pumpkin, squash, and various other plants."—p. 229.

In conclusion, we were sorry, on perusal of this voluminous report, that it was published for the purpose for which it was designed. If we are not mistaken, its author has distinguished

himself for his acumen and skill in the caricography of New England, and we fear that the present work will add no new laurel to his well earned fame. To republish descriptions of our flora, after the many manuals already in circulation, seems needless; and all the new species and the rarer, of botanical interest, with the decidedly useful and important, did not demand so much labor and time. As a specimen of what we could wish to see in this department of our science, we would mention the reports of Dr. Harris on insects, where instead of taking Hitchcock's published catalogue as a basis, he has given, in most simple but interesting descriptions, the noxious and the useful insects of our State. We know not whether that gentleman is yet to report further progress in his entomological researches, but we repeat, that a report such as his, will do more to introduce an attention to the subject of natural history, among our citizens, than those which are but meagre outlines of any department of natural science, and which, exhibiting little of its claim of respect of its intrinsic beauty, can scarcely serve as a record of useful knowledge. X.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Domestic Notices.*

Splendid exhibitions of the Tulip.—It is a gratifying circumstance to us, to be able to inform our readers that there are now *three* most gorgeous displays of that king of florists' flowers, the tulip, in the vicinity of Boston, viz.—one at the Public Garden, in the city, being a bed of one thousand and four bulbs:—our correspondent, Mr. Walker's well known and splendid collection of two thousand bulbs:—and lastly, the amateur collection of J. Cabot, Esq., of Salem, of upwards of one thousand five hundred bulbs. A few years since, Mr. Walker's was the only collection of any note; next came Mr. Cabot's; and now, the Public Garden, desirous of adding as much as possible to their attractions, have added the fine bed now in bloom. It is an evidence that the taste for the tulip is gradually finding its way among amateur cultivators and lovers of flowers, and the more such displays are placed before the public eye, where they

can be gratified with the inspection of the flowers at a reasonable rate, the greater will be the desire to possess a collection of the bulbs.—*Ed.*

Annual meeting of the Burlington Lyceum.—The annual meeting of the Lyceum was held in the Hall of the Society, at Burlington, on the 1st of May, and an address was delivered before the meeting by our correspondent, R. S. Field, Esq., of Princeton, N. J. Mr. Field takes a great interest in flowers and fruits, and is withal a good botanist: he also has one of the finest collections of plants in the state. The following are the officers for the ensuing year:—

Right Rev. George W. Doane, *President*; Rev. Cortland Van Rensselaer, *1st Vice President*; William R. Allen, Esq., *2d Vice President*; Thomas Milnor, Esq., *3d Vice President*; George Gas-kill, *Treasurer*; Thomas Hancock, *Corresponding Secretary*; Joseph W. Griffith, *Recording Secretary*; Samuel R. Wetherill, Chas. Ellis, M. D., Charles Atherton, Thomas Dutton, William I. Allinson, *Curators*; Joseph Askew, Amor W. Archer, William W. King, Archibald W. Burns, William McKee, Jr., *Managers*.

Our correspondent at Burlington has furnished us with the following account of the plants and flowers which were exhibited:—

Knowing that you are fond of hearing of these exhibitions, I herewith send you the names of the contributors, together with the names of the plants exhibited by each. It was nothing like a regular exhibition; there were only a few plants, merely to ornament the room, it being our annual meeting.

From William McKee, Jr., *Rhododendron arboreum superbum*, *Schizanthus* sp., *Epiphyllum Jenkinsonii*, *Ardisia crenulata*, *Mesembryanthemum cristifolia*, roses, pelargoniums, heliotropiums, two fine seedling verbenas, and fine pansies. From William W. King, *Fuchsia coccinea*, *Convulvulus minor*, and roses.

From Amelia Smith, *Cineraria* sp., and *Lachenalia* sp. From Miss Susan Miller, *Corydalis* sp., fine. From Miss Caroline Watson, camellias, sp. *Landrethi* and *sasanqua rosea*, *Pæonia Moutan* arborea, *Pittosporum variegata*, pelargoniums and lachenalias.

From Right Rev. G. W. Doane, *Jasminum lutea*, *Azalea indica alba* and *phœnicea*, *Metrosideros* sp., fine blanched rhubarb, and radishes. From Charles Kinsey, Esq., *Rosa Banksia lutea*, fine. From Mrs. Susan V. Bradford, *Coronilla glauca*, yellow oxalis, roses, and lachenalias. From Joseph Askew, blanched rhubarb. From Samuel R. Wetherill, *Yucca* sp., *Aloe* sp.

From Thomas Hancock, *Nepenthes distillatoria*, *Piper nigrum* in flower, *Laurus cinnamomum*, and *Camphora*, *Pimenta vulgaris*, *Rulingia* sp. *Acacia* sp., *Casuarina stricta*, *Ficus elastica*, *Azalea phœnicea*, *Thea viridis*, *Illicium anisatum*, *Röchea falcata*, *Mesembryanthemum cristifolia*, *Epiphyllum Boydsii*, *Olea europæa*, and roses. T. Hancock, Burlington, N. J., May, 1841.

Destruction of a portion of the green-house of M. P. Wilder, Esq.—It is with much regret that we inform our readers that Mr. Wilder's green-house was partially destroyed by fire, on the morning of the 10th of April, together with a large portion of the plants, particularly the finest varieties of the camellia, which were placed in that part of the house where the fire originated. No cause can be assigned

for the origin of the fire, unless it was from some defect of the flue, through which the flames might have issued and set fire to the wood work. A light fire was made up about nine o'clock in the evening, to warm the house, in consequence of there being a crop of grapes, and was suffered to go out without again receiving any attention from the gardener. The fire was fortunately discovered at an early hour after it broke out: the excessive smoke from the burning wood, penetrating the room where the gardener slept, awakened him, and he gave the alarm: a few moments later, and no efforts could have prevented the total destruction of the whole range of glass, together with every plant.

The damage is, however, very severe; and though there was an insurance on the house, and to the amount of \$1000 on the plants, yet the latter sum would not near cover the loss. All the fine new and rare camellias, several of them lately imported, together with many hundred seedlings of one, two, and three years old, and great quantities sown last fall, including also his beautiful new one, *C. var. Wilderi*, were completely destroyed, with the exception of about a hundred plants. The only hope of saving the new one is in a graft which was put in some time before the fire occurred, and which stood in a situation somewhat remote from the hottest part of the house, and being covered with a sort of bell-glass, (which likewise served to exclude the heat,) it may possibly grow; though, in regard to this, there is considerable uncertainty. We trust, however, that Mr. Wilder may be soon able to ascertain for a certainty whether this truly superb variety is lost to the floricultural world, or not. Should it fortunately live, the loss will not be so severely felt, as the other kinds can be replaced.

Mr. Wilder lost a great many fine new geraniums, dahlias, pansies, &c., most of which had been imported the present spring, and were just recovering from the effects of the voyage. Some time will elapse before a collection of equal beauty can be obtained.—*Ed.*

Fine specimen of Rhododendron arboreum.—I have, in connection with Mr. Pierce, erected a green-house at the corner of Eighth and Ninth streets, where we have an abundance of flowers in bloom; among them a splendid *Rhododendron arboreum*, with twelve distinct clusters of flowers. It is attracting crowds of admirers.—*Yours, J. F. Callan, Washington, D. C., April, 1841.*

ART. II. Pennsylvania Horticultural Society.

An adjourned meeting of the Society was held at its Hall, Tuesday evening, March 23d,—Joseph Price, Vice-President, in the chair.

As this occasion was one intended for a display, there were exhibited several very fine collections of plants, two of which were particularly attractive, presenting a mass of floral beauty, seldom, if ever, surpassed at any former meeting; in one of which were seen speci-

mens of those new and splendid plants, the *Rhododéndron Cunnighamí*, and *R. spectábile*; also new and showy azaleas, cinerarias, with other fine plants. In the other were a number of the finest varieties of camellias, select roses, and seedling azaleas; among the latter was one of much merit, named *Còpei*, in compliment to Mr. Caleb Cope.

A novelty to those present was exhibited, consisting of two glass jars, of about the capacity of three gallons, in which were vegetating in soil of four inches in depth, a number of plants completely enclosed, and which had been mostly so for the past six months; the only communication with the external air having been when occasionally opened for the purpose of removing decayed leaves or portions that had damped off, and without additional supply of water during the time. In one of the jars was a rose; in the other, several indigenous ferns, which had grown during the winter from roots planted in September last; other plants, an arabis, *amphicarpa*, and *liriodendron*, had germinated from seed accidentally in the soil. [This is the same principle as that recommended by Mr. Ward, and mentioned in our Vol. I., p. 24.—*Ed.*]

The following plants &c. were exhibited:—

Exhibited. Plants:—By Robert Buist, *Amaryllis speciosa*, *Azalea coccinea*, *A. elegans*, *A. Gillinghami*, *A. indica alba*, *A. speciosa* (new,) *A. speciosissima* (new,) *Chorizema* var. (new,) *Cineraria bicolor*, *C. elegans*, *C. Hendersoni*, *C. seedlings*, *Correa grandiflora*, *Dillwynia canescens*, *D. ericifolia*, *Diósma capitata*, *Erica mediterranea*, *E. princeps*, *Euphorbia splendens*, *Gesneria magnifica*, *hyacinth* var. *Duc de Vallois*, *Hypoxis* sp., *Kennedyia Marryatti* (new,) *K. speciosa* (new,) *Lechenaúltia formosa*, *Oncidium* sp., *Primula sinensis*, *Rhododéndron Cunnighamí* (new,) and *R. spectábile* (new.)

By Peter Mackenzie, *Acacia floribunda*, *Aloe variegata*, *Azalea indica*, *A. i. alba*, *A. Còpei* (new seedling,) *A. Smithii coccinea*, *Blétia Tankervilleæ*, *Burchellia capensis*, *Camellia japonica* varieties *Béalii*, *Colvillii*, *delicatissima*, *Donckelaeri*, *elegans*, *imbricata*, *Kermesina*, *Lady Hume's Blush*, *Lándrethi*, *oxoniensis*, *Philadélphia* (Smith's,) *tricolor*, and *C. reticulata*, *Cereus flagelliformis*, *Cineraria cruenta*, *C. Kingii*, *C. seedling*, *Citrus myrtifolia*, *Jasminum revolutum*, *Kennedyia coccinea*, *Mathiola flore pleno*, *Oxalis* sp., *Plumbago rosea*, *Polyanthus narcissus*, *P. seedlings*, *Primula sinensis* *fimbriata*, *Rosa Agrippina*, *R. Bengal Cels*, *R. B. Triumphant*, *R. gloire de France*, *R. Smithii*, *Richárdia ethiopica*, *Rhodora azaleoides*, and *Tropæolum tricolorum*.

April 20.—The stated meeting of the Society was held at its Hall, this evening—the President in the chair.

There were shown two cut flowers of seedling camellias, presenting characteristics of the first order; one, propagated by John B. Smith, which he has named *Binneyi*, in honor of, and in compliment to, the President of the Society. The other by Ritchie & Dick, named *Hempsteadii*, and from the plant exhibited at the stated meeting of the 16th ult.

April 27.—A meeting continued by adjournment from the stated meeting, was held by the Society at its Hall this evening—the President in the chair.

The Committee on Vegetables reported, that the display of vegetables this evening was very interesting, and got up with a great degree of neatness and variety; and that they award the premium for the best forced cucumbers to Joseph Cook, gardener to William Norris; for the most interesting display of vegetables, to William Chalmers, gardener to Mrs. Stott; for the next most interesting, to Joseph Cook; and for the third most interesting, to Jacob Engleman.

The Committee noticed four bunches of fine asparagus from Robert Kilvington: also several heads of the vegetable called borecole, shown for the first time before the Society, by Jacob Engleman.

The Committee on Plants and Flowers report that they have awarded the Society's premiums as follows, viz:—

For the best six pelargoniums in pots, to Joseph Cook; for the next best six pelargoniums in pots, to Joseph Cook; for the best six pots of pansies, to Wm. Chalmers, Sen.; for the next best six pots of pansies, to Wm. Chalmers, Sen.; for the best bouquet, to John Sherwood; for the next best, to Ritchie & Dick; and for the most interesting collection of plants in pots, to Joseph Cook.—(*Soc. Rep.*)

ART. III. *Massachusetts Horticultural Society.*

Saturday, April 24, 1841.—The following are the reports of the several committees awarding premiums for the past year, which were accepted at this meeting, and were omitted in our last for want of room.

REPORT OF THE COMMITTEE ON FLOWERS,

FOR 1840.

The Committee on Flowers respectfully submit the following report of the premiums awarded for the year 1840:—

HYACINTHS. —For the best display, a premium to Joseph Breck & Co., of		\$5 00
TULIPS. —For the best twelve blooms, to Samuel Walker, a premium of		10 00
For the second best twelve blooms, to S. R. Johnson, a premium of		5 00
GERANIUMS. —For the best six plants in bloom in pots, to A. Bowditch, a premium of		5 00
For the next best six plants in bloom in pots, to W. Meller, a premium of		3 00
PANSIES. —For the best twelve flowers, to S. Walker, a premium of		5 00
For the best six different varieties, to W. Meller, a premium of		3 00
For the best seedling, to S. Walker, a premium of		2 00

ROSES. —For the best fifty blooms of hardy roses, to J. A. Kenrick, a premium of	8 00
For the second best fifty blooms, to S. R. Johnson, a premium of	6 00
For the best display of Chinese and other tender varieties, to S. R. Johnson, a premium of	5 00
PÆONIES. —For the best display of flowers, to W. Kenrick, a premium of	5 00
For the second best display of flowers, to J. A. Kenrick, a premium of	3 00
PINKS. —For the best display of flowers, to S. Walker, a premium of	5 00
For the best seedling, to S. Walker, a premium of	3 00
CARNATIONS. —For the best display of flowers, to W. Meller, a premium of	5 00
For the second best display, to John Hovey, a premium of	3 00
GERMAN ASTERS. —For the best display of flowers, to Messrs. Hovey & Co., a premium of	5 00
For the second best display of flowers, to J. J. Low, a premium of	3 00
ANNUALS. —For the best display, to Joseph Breck & Co., a premium of	3 00
For the second best display, to Hovey & Co., a premium of	2 00
DAHLIAS. —Premier prize: best six blooms, to M. P. Wilder, a premium of	15 00
Specimen bloom: the best flower, to M. P. Wilder, a premium of	5 00
Discretionary premium for second best, to J. J. Low	5 00

DIVISION A.

<i>Class I.</i> —Best twenty-four blooms, to M. P. Wilder	8 00
Second best twenty-four blooms, to J. J. Low	6 00
<i>Class II.</i> —Best twelve blooms, to J. Stickney	6 00
Second best twelve blooms, to Hovey & Co.	4 00
<i>Class III.</i> —Best six blooms, to D. Haggerston	4 00
Second best six blooms, to J. A. Kenrick	2 00

DIVISION B.

<i>Class I.</i> —Best twenty-four blooms, to D. McIntyre	8 00
Second best twenty-four blooms, (no prize.)	
<i>Class II.</i> —Best twelve blooms, to S. Walker	6 00
Second best twelve blooms, to S. Sweetser	4 00
<i>Class III.</i> —Best six blooms, to W. Meller	4 00
Second best six blooms, to W. E. Carter	2 00

\$173 00

The Committee have exceeded the amount voted to them by the Society \$48 00. It was their intention to ask for a larger sum last spring, but, upon further consultation, they concluded to offer suitable premiums for the encouragement of the dahlia, a plant which adds so much to the interest of our annual displays, and leave it for the Society to make up the deficit at the end of the season.

The Committee are happy to have it in their power to state, that

the shows have been much more interesting than usual; that the specimens of flowers exhibited, with the exception of carnations, have been very beautiful, and the premiums have been worthily gained by the respective exhibitors. They only regret that it was not in their power to award a larger sum, and for a greater variety of objects, which are well deserving of encouragement.

In conclusion, they would hope that the funds of the Society will enable them to devote a more liberal sum for premiums, believing that in no way can the interests of the science of horticulture be so much advanced. Respectfully submitted.—*C. M. Hovey, Chairman.*

[The appropriation of money for the Flower Committee having been but \$125 00, the Executive Committee could not approve of the report, without its being reduced to that amount, and it was then accepted, with the provision that the premiums should be paid *pro rata* on that sum.]

REPORT OF THE COMMITTEE ON FRUIT.

The Fruit Committee of the Massachusetts Horticultural Society, for 1840—41, recommend for the approval of the Executive Committee the following premiums on Fruits, to be paid from an appropriation made for that purpose.

APPLES. —For the best Summer Apples, to John Hovey, Roxbury		\$5 00
For the best Autumn, to George Lee, West Cambridge		5 00
For the best Winter, to Benjamin V. French, Braintree		5 00
PEARS. —For the best Summer Pears, to Samuel Pond, Cambridge Port		5 00
For the best Autumn, to Samuel Pond, Cambridge Port		5 00
For the best Winter, to Marshal P. Wilder, Dorchester		5 00
CHERRIES. —For the best Cherries, to Elijah Vose, Dorchester		5 00
For the next best, to John A. Kenrick, Newton		4 00
PEACHES. —For the best Peaches, open culture, to J. L. L. F. Warren, Brighton		5 00
For the next best, (a seedling,) to E. M. Richards, Dedham		4 00
For the best under glass, to Mr. Milne, Portland, Me.		5 00
PLUMS. —For the best plums, to Samuel Pond		5 00
GRAPES. —For the best foreign grapes under glass, to David Haggerston, Watertown		10 00
For the best foreign grapes, open culture, to Samuel R. Johnson, Charlestown		5 00
NECTARINES. —For the best nectarines, to Elias Phinney, Lexington		5 00
QUINCES. —For the best quinces, \$3 00 each to Elijah Vose, Dorchester, and Samuel Pond		6 00
GOOSEBERRIES. —For the best gooseberries, to John Hovey, Roxbury		5 00
RASPBERRIES. —For the best raspberries, to Aaron D. Weld, Roxbury		5 00

STRAWBERRIES.—For the best strawberries, to Messrs.	
Hovey & Co., Boston	5 00
For the next best, to J. L. L. F. Warren, Brighton	4 00
CURRANTS.—For the best currants, to Aaron D. Williams,	
Roxbury	3 00
MELONS.—For the best muskmelons, to Elijah Vose, Dor-	
chester	3 00
For the best watermelons, to Clement Sharp, Roxbury	3 00
For a great variety of pears, a gratuity to R. Manning,	
Salem	10 00

\$122 00

The amount of premiums awarded is one hundred and twenty-two dollars, being within the amount appropriated for that purpose; which is respectfully submitted for consideration and approval, by the Committee on Fruits.—*Benjamin V. French, Chairman.*

REPORT OF THE COMMITTEE ON VEGETABLES.

The Committee would report the following premiums for the year 1840.

ASPARAGUS.—No premium.	
BEANS.—Large Lima, to E. Vose	
Early Dwarf—no premium.	\$3 00
BROCOLI.—No premium.	
BEETS.—To A. D. Williams	
	2 00
CABBAGES.—No premium.	
CARROTS.—No premium.	
CAULIFLOWER.—No premium.	
CELERY.—No premium.	
CORN.—For boiling, to J. L. L. F. Warren	
	2 00
CUCUMBERS.—To J. L. L. F. Warren	
	4 00
LETTUCE.—No premium.	
PEAS.—To J. L. L. F. Warren	
	4 00
POTATOES.—No premium.	
RHUBARB.—To Samuel Walker	
	3 00
SQUASHES.—Winter, to A. D. Williams	
	3 00
Summer—no premium.	
TOMATOES.—To John Hovey	
	3 00
EGG PLANT.—To E. M. Richards	
	2 00
BRUSSELS SPROUTS.—To John Prince	
	2 00

\$27 00

The Committee recommend the following gratuities:—

To Messrs. Hovey & Co., for fine specimens of white carrot, exhibited at the annual exhibition	
	\$2 00
To E. Phinney, Esq., Lexington, for the very fine specimen of Squash, called "Harrison Squash," a gratuity of	
	4 00

\$33 00

All of which is respectfully submitted.—*Samuel Pond, April 24, 1841.*

ART. IV. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Pot and Sweet Herbs.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Paraley, per box,.....	12½	—	
Chenangoes, } per barrel,	1 25	1 50		Sage, per pound,.....	17	20	
} per bushel,	50	—		Marjorum, per bunch,....	6	12½	
Common, } per barrel, ..	1 25	—		Savory, per bunch,.....	6	12½	
} per bushel, ..	50	—		Spearmint, (green,) pr. b'ach,	4	—	
Eastports, } per barrel, ..	2 25	2 50					
} per bushel, ..	1 00	—					
Nova Scotias, } per barrel,	1 50	1 75					
} per bushel,	75	—		<i>Squashes and Pumpkins.</i>			
Turnips:				Squashes, per pound:			
Common, per bushel,....	37½	50		Autumnal Marrow, ...	—	—	
Ruta Baga, per bushel,....	37½	50		Winter crookneck, ...	3	—	
French, per bushel, ...	37½	50		Canada crookneck, ...	—	—	
New, per bunch, ...	25	—		West India, ...	2	3	
Onions:				Pumpkins, each, ...	8	12½	
White, per bunch, ...	3	4					
Red, per bunch, ...	3	4					
Yellow, per bushel, ...	75	—		<i>Fruits.</i>			
New white, per bunch, ..	4	6					
Beets, per bushel, ...	50	62½		Apples, dessert:			
Carrots, per bushel, ...	50	—		Common, per bushel, ...	1 00	—	
Parsnips, per bushel, ...	75	—		Extra, per bushel, ...	1 50	3 00	
Radishes, per bunch, ...	6	10		Baldwins, per barrel, ...	4 00	4 50	
Shallots, per pound, ...	20	—		Russets, per barrel, ...	2 50	3 00	
Garlic, per pound, ...	12½	—		Greenings, per barrel	—	—	
Horseradish, per pound	10	12½		Pearmains, per barrel, ...	—	—	
				Sweet, per barrel, ...	—	—	
<i>Cabbages, Salads, &c.</i>				Dried apples, per pound, ..	3½	4½	
Cabbages, per dozen:				Pears:			
Savoy, ...	—	—		Baking, per bushel, ...	2 00	2 50	
Dramhead, ...	50	75		Cucumbers, each, ...	12½	25	
Red Dutch, ...	75	1 00		Grapes, per pound:			
Cauliflowers, each, ...	12½	25		Malaga, ...	20	25	
Celery, per root:				Pine-apples, each, ...	25	37½	
Common, ...	10	12½		Cranberries, per bushel, ..	1 50	2 00	
Spinach, per half peck, ...	6	12½		Lemons, per dozen, ...	20	25	
Dandelions, per half peck, ..	6	—		Oranges, per dozen :			
Cabbage sprouts, per half p'k,	6	—		Sicily, ...	20	25	
Lettuce, per head, ...	4	6		Havana, (sweet), ...	37½	50	
Asparagus, per bunch, ...	6	8		Chestnuts, per bushel, ...	2 25	2 50	
Rhubarb, per pound, ...	3	4		Walnuts, per bushel, ...	2 00	2 50	
Turnip tops, per peck, ...	12½	—		Castana, ...	—	—	
Cucumbers, (pickled) pr gal.	25	—		Cocoanuts, ...	—	—	
Peppers, (pickled) per gallon	37½	—		Filberts, ...	—	—	

REMARKS.—Two months have passed since our last report, owing to want of room in our last number. Though an exceedingly backward spring, yet, at the present period, there has been a great change from the early part of the month. April was a cool and backward month, accompanied by showers and storms, mostly from the east,

which rendered the soil so heavy and cold, that it could not be ploughed or planted with any prospect of success. In the early part of this month, showery and cool weather still continued, but about the 15th the thermometer rose considerably, and from that time to the present date, vegetation never advanced more rapidly, and the prospect now is of a favorable season.

Potatoes, since our report, owing to the lateness of spring, have become more firm in price, and at advanced rates from our last; good Chenangoes have brought, from the vessel, fifty to fifty-five cents: early potatoes will not come in so early as usual, and the old stock will continue to be in good demand. Turnips are scarcer, and prices a little higher. Bunched onions are plentiful: white are all gone; but to take their place, there is a good supply of the new crop. Beets, carrots, and parsnips remain the same. Radishes are now tolerably plentiful, but, in the course of a few days, they will be abundant.

Cabbages are nearly all gone; a few drumheads and red Dutch only remaining. Cauliflowers are nearly all gone. Celery yet comes to hand, though of small size. Spinach, dandelions, &c. were never more plentiful, or prices lower. Rhubarb has been supplied in small quantities, nearly all the month: Wilmot's early scarlet, though not a large growing sort, is very much earlier than the old kinds: prices commenced at a shilling per pound, but are now reduced to our quotations. Asparagus very abundant; the last four or five hot days have almost filled the market. Lettuce good, and well supplied. Parsley plentiful. Mint abundant. Squashes are nearly all gone, except West Indias, which now supply the place of the others. No vegetables from the south have yet appeared.

Apples are reduced to a small stock, principally russets and Baldwins; prices have considerably advanced. Pears are all gone. Pineapples are retailed in small lots at twenty-five to thirty-seven and a half cents. Cucumbers have been in the market nearly a month, and now command our quotations. Cranberries are a little higher. Lemons and oranges plentiful and good, and at low prices. In nuts there has been no change.—*M. T., Boston, May 23, 1841.*

HORTICULTURAL MEMORANDA

FOR JUNE.

FRUIT DEPARTMENT.

Grape vines will now have set their fruit, and the berries will soon be of good size. Commence syringing again, and keep it up in all good weather, three or more times each week; the latter part of the

month the operation of thinning the berries may be commenced. Keep the wood for bearing next year well laid in, and cut away all superfluous shoots. Vines in the open air should be attended to, and well trained to the trellis or wall. Cuttings in pots will also need good supplies of water.

Strawberry beds should receive attention. Lay clean straw or hay between the rows, to keep the fruit from the earth. Keep the beds clear of weeds.

FLOWER DEPARTMENT.

Dahlias should now be planted out: commence immediately, and continue to plant until the 20th of the month; a succession of flowers will thus be obtained, the first flowering early and making a good display in the garden, but the latter giving the best blooms for prize flowers. Keep the plants tied up to a stake: cut off all superfluous branches, and keep them free from insects by occasional syringing and frequently looking over the plants. Water freely in dry weather.

Camellias should now be removed from the green-house to the open air, placing them in a situation where the sun will not shine on them only in the morning.

Tulips will be in flower now: when they have done blooming, cut off the seed pods, and keep the beds free from weeds.

Annuals, sown in frames or hot-beds, particularly of the tender kinds, may be transplanted into the borders. Continue to sow pansies, candytufts, larkspurs, mignonette, &c. for a succession.

Verbenas should be planted out in the open ground.

Geraniums should be propagated this month. Cut down the old plants, and place them in a half shady situation.

Ericas may yet be propagated with success. Young plants do best in frames facing the north.

Chrysanthemums, not already potted off, should be attended to.

Roses, *geraniums*, *salvias*, *pyrethrums*, *alonsoas*, &c., which have been kept in the green-house, may be turned out into the border.

Poinsettia pulcherrima.—Old plants should now be cut down, in the same manner as geraniums; and if a stock is wanted, cuttings should be inserted in small pots, and placed in a hot-bed: the old roots should be turned out into the border, where they will do much better than in pots.

Ten-week stock gilliflower seed should be sown now, to produce plants for flowering next winter.

Perennial and biennial seeds, such as larkspurs, sophora, lychnis, everlasting pea, blue-bells, fox-glove, &c., may be sown any time this month.

Chinese primrose seeds should be sown now.

Green-house plants, of all kinds, should be removed to a favorable situation in the open air, where they will be shaded from the sun, except morning and evening.

Roses may be budded the latter part of the month, and they will make good plants, and produce flowers, in the course of the summer. The Boursalt makes a good stock for the yellow and blush Teas, and other slender growing sorts.

THE MAGAZINE

OF

HORTICULTURE.

JULY, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *List of Seeds received by the Public Garden, from the Botanical Garden at Trieste.* Communicated by J. E. TESCHEMACHER.

I BEG leave to hand you a list of between three and four hundred kinds of seeds I have received from the Botanical Garden at Trieste, and have sown in the Public Garden: most of them are forms of vegetable life as yet unknown here in a living state, and although many of them are perhaps destitute of beauty, they are all of much interest to the botanist. I think, by occasionally inserting papers on botanical subjects, as you have lately done, your Magazine is likely to secure a wider range of interest than if strictly confined to horticultural objects. Those marked with a star have already appeared above ground. Persons accustomed to sow large numbers of botanical seeds, are aware that from many circumstances of soil, climate, too much moisture, or the want of it, a large proportion of what is sown usually fails; already as many of this parcel as I expected have succeeded, but I think several more will still come up. I shall keep a regular account of them as they come into flower, and if there are any which either from their curiosity or beauty may be considered ornaments to the gardens in this vicinity, I shall be happy to distribute seeds of them. Yours truly,

J. E. T.

Boston, June 14, 1841.

*Antirrhinum diffusum**
*calycinum**
Asteriscus aquaticus
Aubrieta deltoidea
Alyssum cheiranthoides
*petreum**
*draba**
Arabis moschata
turrita
Athanasia annua
Achillea acuminata
alpina
tanacetifolia
*salicifolia**
Eupatoria
myriophylla
odorata
scabra
Asteroccephalus siculus
altaicus
*Arctium ferox**
*Apargia hirta**
hispanica
Aster altaica
praecox
Artemisia serrata
glauca
*rupesstris**
desertorum
armeniaca
*Amarantus cruentus**
crassipes
*bahiaensis**
*recurvatus**
*tenuifolius**
*hecticus**
*polygamoides**
*incomptus**
*Bernhardi**
*curvifolius**
melongolicus
mollissimus
*Anthemis Cota**
senecioides
*valentina**
*graveolens**
arabica
Kitaibellii
punctata
*petraea**
Anastasia senegalense
Ajuga chamaepitys

Agrimonia odorata
Aconitum Lycoctonum
*Anchusa incarnata**
italica
Arum majus
*Bæberi**
*Aspidium romænum**
Anthocercis litoræa
Aquilegia alpina
Alternanthera ficoides
Atropa belladonna
*physaloides**
Axyris amaranthoides
Anacyclus bicolor
Allium persicum
moschatum
Achnodonton tenue
*Abutilon avicenna**
Asclepias curassavica
fruticosa
*Agrostemma nicaeensis**
Armoria plantaginea
Asperula tiratica
Allionia nyctaginiflora
Anoda cristata
Asphodelus tenuior
Anagallis latifolia
Acorus graminifolius
Arenaria subulosa
Atriplex veneta
Phaoloni
laciniata
Astragalus alopecurus
glauca
laxiflorus
sincicus
tribuloides
Angelica archangelica
*Ethusa elata**
Egopodium podagraria
Anthonanthum gracile
*Andropogon laguroides**
Amsonia latifolia
*Eschynomene cappadocia**
Buphthalmum cordifolium
Bubon dichotomus
glauca
Biscutella erigerifolia
*cichorifolia**
depressa
*columnna**
marginata

*Brassica elongata**
Besseriæna
Bupleurum longifolium
trifidum
*perfoliatum**
*Bartonia hexacantha**
Bigelovia stricta
Baccharis glutinosa
Bunias orientalis
aspera
Boltonia glastifolia
*Brotera trinervata**
*Borkhausia Candollei**
Berteroa incana
procumbens
Boerhaavia diffusa
Bryonia palmata
*Bulbine annua**
*Bæbera chrysanthemoides**
*ponophylla**
glandulosa
*Brõmus caputmedusa**
*Willdenovii**
madritensis
*vestitus**
Brachypodium nardus
Caucalis daucoides
Carlina corymbosa
*Dracocéphalum Ruischianum**
Dinèbra arabica
*Dolichos lignosus**
*violaceus**
Dalea lagopus
Desmochæta atropurpurea
Dyssodia glandulosa
Erysimum helveticum
*altaticum**
*odoratum**
*Echencus Carlinoïdes**
Echinospérmum heteranthum
Echinophora spinosa
Echinops ruthenicus
retro
Echium créticum
Sibthorpi
violaceum
Eryngium campestre
Erigeron acre
Erodium Stephanianum
Eruca surgida
Eclipta erecta
Emex spinosa

Euphòrbia variegata
pineæ
palustris
characias
achanocarpa
*italica**
uralensis
*purpurascens**
prunifolia
Eleusine corocani
tristachia
Echinòria capitata
Elymus arenarius
*Eroum camellirum**
antiquorum
*Gomphrena tumida**
Gnaphalium luteum album
diosmæfolium
fuscatum
candelabrum
*Geranium alchemilloides**
Genista pulchella
sylvestris
Galium lucidum
Glaucium violaceum
Glycyrrhiza glabra
*Galèga orientalis**
Gaillardia bicolor
Hedynois tubæformis
*Helminthia echioides**
Hieracium lanatum
*perfoliatum**
*sanguineum**
*Gronovii**
*dubium**
blattarioides
*Hesperis ramosissima**
*nivea**
*Hypochæris glabra**
Hladnickia golacensis
pastinacifolia (stirpsra-
rissime)
Heliophila amplexicaulis
erithimifolia
Hasselquistia ægyptiaca
Heracleum longifolium
austriacum
Hayea teneriffa
Hyoscyamus canariensis
pictus
Helianthemum salicifolium
rhodanthum

*Helianthemum marifolium**
Hyacinthus romanus
Herniaria Besseriæna
 incana
Heliotropium europæum
Juniperus oxycædra
*Linaria dalmatica**
 tristis
 cirrhosa
Lepidium Eckloni
Lunaria annua
Lactuca altissima
 scaredola
Leonurus villousus
 illyricus
Lasthenia glabrata
Lodsa tricolor
Lithospermum latifolium
Laserpitium selenifolium
Lotus suaveolens
 ciliatus
 edulis
Lavatera salviatalensæ
 campêstris
Lantana salviæfolia
Lysimachia atropurpurea
 dubia
Lycopsis europæus
Lupinus hirsutus
Ladlingia hispânica
Lõnas inodora
Láthyru climenum
 angulatus*
 lusitanicus
Népeta marrubioïdes
Onopordum græcum
 intermedium
 horridum
 illyricum*
 virens*
*Onobroma crética**
Ouõnis hircina
 pinguis*
 viscosa
 ramosissimus
 mitissima
*Ormènis coronopifolia**
Picris Sprengeliana
*Potèrium agrimonifolium**
 rubellum
Podospermum laciniatum
 Jacquini

Passerina annua
Potentilla molinieri
 Jacquini
 venosa
Phanidopus vimineus
Prasium majus
*Plantago psyllium**
 cornuti
 Jacquini
 cordata
 laxiflora
*Pyrèthrum niveum**
 caucasicum
 alpinum
Polanisia graveolens
Portulaca grandiflora
 latifolia*
Paronychia arabica
Palasoxia linearis
Phyllis robila
Pavonia præmorsæ
Papaver intermedium
 persicum
Poa pellucida
 leptostachya
 tenuissima
Panicum zonale
 numidianum
 aurantiacum
Psillurus nardioides
*Phaseolus cæffer**
 jonosperma
Ruta bracteosa
Scirpus mucronatus
 holoschænus
*Silene anglica**
 livida*
Thapsia præcox
*Uraspermum Dalechampi**
Veronica pulverulenta
 maritima
 laxiflora
 Buxbaumii
 crenulata
 Waldsteinii
 ceratocarpa
 Clusii
 arabidifolia*
Valerianella gracilis
Verbena venosa
 hispida
 bonariensis

<i>Verbascum phæniceum</i>	<i>Ficia polyphylla</i>
<i>blattària</i>	<i>amphicârpea*</i>
<i>Viola occûlta*</i>	<i>tricolor*</i>
<i>lâctea</i>	<i>hybrida*</i>
<i>persicæfôlia</i>	<i>atropurpûrea*</i>
<i>rothoinagénsis</i>	<i>hîrta*</i>
<i>Velèzia rígida</i>	<i>Valántia muràlis*</i>

[The above list probably contains many fine plants, and we hope that the good care which they will receive under the superintendence of our correspondent, will cause many more of them to vegetate. We shall expect to find some valuable additions in the genera *Allyssum*, *Achillèa*, *Amarántus*, *Anthemis*, *Euphórbia*, *Verónica*, *Verbèna*, &c.

Some of the panicums and poas may prove valuable additions to our cultivated grasses.

The Botanical Garden at Trieste contains a fine collection of plants, and we do not doubt but that the above list includes many excellent species. Lovers of flowers will not, we hope, forget to avail themselves of the kind offer of Mr. Teshemacher to distribute the seeds.—*Ed.*]

ART. II. *On the Destruction of the Slug, which infests the Rose Bush.* By D. HAGGERSTON, Gardener to J. P. Cushing, Esq. In a letter read before the Massachusetts Horticultural Society.

[WE are happy to have the opportunity, thus early, to lay before our readers the communication of Mr. Haggerston to the Massachusetts Horticultural Society, upon the destruction of the rose *slug*. It will be recollected that by the liberality of T. Lee, Esq., and other gentlemen of this vicinity, the Society offered the handsome premium of one hundred and twenty-five dollars to any individual who should discover a mode of destroying the insect without injuring the foliage, or otherwise damaging

the plant. This, we believe, has been fully effected, by the remedy which Mr. Haggerston suggests in his letter. So far as we have tried experiments, we have found it effectual. It will receive, however, further attention, the subject having been referred to the Committee on Flowers, who are to report to the Society, after having satisfied themselves that it will fully destroy the insect.

Mr. Haggerston, thus far, is the only competitor for the premium. Yet we think it doubtful whether any one else will contend with him, as no method could be easier or cheaper, it being within the means of every one who can purchase a few pounds of soap, (costing a few cents,) and a water pot.

We would also call the attention of our friends to the remarks of Mr. Haggerston in relation to the value of the whale oil soap in killing that destructive little insect the *thrips*, or vine-fretter, commonly called: within a year or two they have so rapidly increased, that they have been almost as injurious to the rose bush as the slug. The solution is certain death to them as soon as it touches them. The aphides, or green lice, so troublesome, and withal such dirty insects, are no less summarily dispatched. Indeed, we consider Mr. Haggerston's discovery as one of the most valuable which has been made for a long time, and if the premium were ten times the amount, he would have fully deserved it. Great credit is due to him for his exertions in endeavoring to find some method of killing the slug, and the great number of experiments he instituted for this purpose, before he could accomplish his object.

His field of experiments was large, and he was desirous, as well as his liberal employer, to get rid of an insect which had become so numerous that it was no satisfaction to cultivate a collection of roses, to be thus destroyed. We congratulate the floricultural world that this obstacle to the general cultivation of so lovely a flower as the rose is removed, and that we may hereafter see it flourishing in all its splendor.—*Ed.*]

To the President of the Massachusetts Horticultural Society.

Sir:—Having discovered a cheap and effectual mode of destroying the *rose slug*, I wish to become a competitor for the premium offered by the Massachusetts Horticultural Society.

After very many satisfactory experiments with the following substance, I am convinced it will destroy the above insect in either of the states in which it appears on the plant, as the fly when it is laying its eggs, or as the slug, when it is committing its depredations on the foliage.

Whale oil soap, dissolved at the rate of two pounds to fifteen gallons of water: I have used it stronger without injury to the plants, but find the above mixture effectual in the destruction of the insect. I find, from experiments, there is a difference in the strength of the soap; it will be better for persons using it to try it diluted as above, and if it does not kill the insect, add a little more soap, with caution.

In corresponding with Messrs. Downer, Austin & Co., on the difference in its appearance, they say, "whale oil soap varies much in its relative strength, the article not being made as soap, but being formed in our process of bleaching oil; when it is of very sharp taste and dark appearance, the alkali predominates, and when light colored and of flat taste, the grease predominates." The former I have generally used, but have tried the light colored, and find it equally effectual, but requires a little more soap, say two pounds to thirteen gallons of water.

Mode of preparation.—Take whatever quantity of soap you wish to prepare, and dissolve it in boiling water, about one quart to a pound; in this state strain it through a fine wire or hair sieve, which takes out the dirt, and prevents its stopping the valves of the engine, or the rose of the syringe; then add cold water to make it the proper strength; apply it to the rose bush with a hand engine or syringe with as much force as practicable, and be sure that every part of the leaves are well saturated with the liquid; what falls to the ground in application will do good in destroying the worms and enriching the soil, and from its trifling cost, it can be used with profusion; a hogshead of one hundred and thirty-six gallons costs forty-five cents, not quite four mills per gallon. Early in the morning, or in the evening, is the proper time to apply it to the plants.

As there are many other troublesome and destructive insects the above preparation will destroy, as effectually as the rose slug, it may be of benefit to the community to know the different kinds upon which I have tried it with success.

The Thrips, often called the vine-fretter, a small, light-col-

ored or spotted fly, quick in motion, which in some places are making the rose bush nearly as bad in appearance, as the effects of the slug.

Aphis, or plant louse, under the name of green or brown fly; an insect not quick in motion, very abundant on, and destructive to, the young shoots of the rose, peach trees, and many other plants. The Black Fly, a very troublesome and destructive insect, that infests the young shoots of the cherry and the snow-ball tree. I have never known any positive cure for the effects of this insect, until this time.

Two varieties of insects that are destructive to, and very much disfigure, evergreens, the balsam or balm of Gilead fir in particular; one an aphid, the other very much like the rose slug.

The Acarus, or red spider, that well known pest to gardeners.

The above insects are generally all destroyed by one application, if properly applied to all parts of the foliage; the eggs of most insects continue to hatch in rotation during their season; to keep the plants perfectly clean, it will be necessary to dress them two or three times.

The disease, Mildew, on the gooseberry, peach, grape vine, &c. &c., is checked, and entirely destroyed by a weak dressing of the solution.

The Canker Worm. As the trees on this place are not troubled with this worm, I have not had an opportunity of trying experiments by dressing the trees, but have collected the worms, which the liquid kills by being touched with it. The expense of labor and engines for dressing large trees, to be effectual, may be more than the application of it will warrant, but I think by saturating the ground under the trees with the liquid, about the time the insects change from the chrysalis state and ascend the trees, it will destroy them; or when the moths are on the tree, before laying their eggs, they may be destroyed without much labor. In either case, the mixture may be applied much stronger than when it comes in contact with the foliage. Laying it on the trunk and branches of the tree, of the consistency of thick paint, destroys the brown scaly insect on the bark, and gives the tree a smooth, glossy, and healthy appearance.

I remain, Sir, your obedient servant,

DAVID HAGGERSTON.

Watertown, June 19, 1841.

ART. III. *Some Notice of the recent Experiments made in the Propagation and growth of Plants, in Charcoal.* Extracted from the translation in the *Gardener's Magazine*, from the "*Garten Zeitung*."

SINCE the publication of Liebig's *Organic Chemistry*, charcoal seems to have become a more important substance in vegetation, and to possess more valuable properties than has heretofore been supposed. Recent experiments in Germany have resulted in placing it as one of the most important agents in the propagation of plants, which has ever been discovered. The theory of its operation has been explained by some of the German writers, which we shall have occasion to notice in our remarks. Believing the subject to be one of importance to all cultivators of plants, we have devoted a few pages to a notice of the experiments which have been made in Germany, and which are, at the present time, attracting attention in England, by the publication of several articles translated from the "*Garten Zeitung*," of Germany, in the *Gardener's Magazine*.

The discovery of the method of growing plants in charcoal was first made by M. Lucas, an assistant in the Royal Botanic Garden of Munich. He observed several plants in the hot-house, that were plunged in charcoal ashes, [the dust,] or the refuse of charcoal, showed an extraordinary vigor of growth, as soon as they had pushed their roots through the holes in the bottoms of the pots, into the charcoal. Among other plants which exhibited this vigorous growth so strikingly, was the *Thunbergia alata*, which ripened its seeds without impregnation. M. Lucas, struck with the appearance of the plants, thought it would be well to follow up the experiment: this he did by adding a proportion of charcoal powder to the usual mixt soil, in which plants were already rooted, and also by using it *pure* for cuttings, instead of sand. We shall divide the subject into three parts, viz:—Propagating Cuttings in Charcoal—Charcoal as a mixture with earth—and the Theory of its action on Vegetation.

Propagating cuttings in charcoal.—M. Lucas, before proceeding with a record of his labors, describes the mode in which his beds were prepared for the insertion of the cut-

tings. He states that small boxes are suspended in the front part of a bed, (on the inside,) in the hot-house, which bed is warmed by means of a tube of sheet iron, instead of tan. The boxes have glazed sashes for covers; in one of these boxes he made the first experiment. The charcoal used for the purpose was fir, [pine,] the refuse of which, being too fine to be burnt, may be had in any quantity. It is sifted through a coarse earth sieve, to separate the large pieces that are usually mixed up with it, and it is then used without further preparation. The charcoal, he remarks, is better if it has laid exposed to the influence of air and weather. In the propagating box, it is laid only four inches thick in the bottom, as a deeper layer would prevent the access of heat, charcoal, as is well known, being a bad conductor. Thus prepared, the cuttings were put in. Cuttings of the following plants, placed in charcoal, rooted in eight to fourteen days:—*Euphòbia fùlgens* and *pícta*, *Ipomæa pùrga*, and *I. supérba*, *Hàkea microcarpa*, *Lobèlia pícta*, *Thunbérghia alàta*, *Lycestèria formòsa*, *Ficus religiòsa* and *péndula*, *Begònia fagifòlia*, *sanguinea*, and *dipétala*, *Tropæolum majus* fl. pl., and several other plants. Cuttings of the *Cácti* family, planted in charcoal, were particularly successful: of some hundred specimens that had been dried for some days previously in the air, about twenty succeeded perfectly; among them were some echinocactuses, melocactuses, and mammillarias, many of them from one and a half to three inches in diameter. *Cereuses* and *epiphyllums* rooted readily, and in this short space of time the roots of many of the species were six inches long; other succulent plants rooted quickly.

In from a fortnight to three weeks the following, very difficult of propagation:—*Piper nigrum*, *Aster tomentòsus*, *Mimòsa Houstòni*, *Barlèria hystrix*, *Alnus barbàta*, and many others.

In from three to four weeks:—*Cròton adenophylla*, *Dracæna hùmilis*, *Pandanus amaryllidifolius*, and several others.

In from six weeks to two months, a few exceedingly hard plants to grow, rooted in the charcoal.

These being the first experiments, some of which did not succeed well, allowance must be made for the newness of the method, and other circumstances attendant upon resorting to new systems.

M. Lucas was also highly successful in rooting leaves and

parts of leaves of various plants, some of which were the following:—*Lophospérmum scándens*, *Cyclamen indicum*, *Sinningia guttata*, gloxinias, ipomæas, &c. &c.

It will be seen that many slow rooting plants have been more speedily rooted than by the ordinary method of propagation, and we trust that future experiments, conducted with care, by our amateur gardeners, will show more particularly its results.

Application of charcoal as a mixture with earth.—The success which attended M. Lucas in his mode of inserting cuttings in charcoal, induced him to try it for another purpose, viz., using it as a mixture with various sorts of earth. It here also showed its extraordinary effects, by the luxuriance and more perfect development of the plants; it was particularly the case with tuberous rooted plants.

A bed appropriated to the growth of seedling plants in pots, plunged in charcoal, was cleaned out and made ready for the reception of a lot of arums, begonias, gloxinias, &c.: the pots were plunged in the charcoal to the rim, and the surface of the soil covered with loose mould from a dung bed. These tubers soon shot up vigorously, but owing to the frame being wanted where it was intended to remove them in the summer, they were allowed to remain. The plants absorbed a great deal, and needed water every day. When the pots were taken up in the fall, it was found that the roots had grown over and under the pots, and penetrated into the charcoal, and grown so strong that it was absolutely necessary to replant the tubers in larger pots. Charcoal was of course mixed with earth in repotting, in the proportion of rather more than one half. Every plant soon showed extraordinary luxuriance under this treatment; some were particularly rich in the inflorescence, the foliage darker, and the period of the duration of the flowers unusually long. Some small tubers, from which no flowers were expected the first year, flowered beautifully. Some *Cacti* grew beautifully, and several of the Mexican euphorbias showed great vigor.

The application of charcoal for the cure of sickly trees, was not less successful. M. Lucas states that an orange tree with yellow leaves, having had a layer of charcoal laid on, after the surface soil was removed, soon recovered its vigor; and this was also the case with gardenias. Of the quantity to be used, there is no particular rule: half charcoal may be

used without injury, observing only that it has been exposed to the influence of the weather for some time, and the large pieces removed: watering must not be neglected, as the soil is rendered more porous, and the moisture passes off rapidly.

Many other experiments were tried, such as sowing seeds in charcoal: ferns, sown directly on the surface of a pot of charcoal, vegetated quickly and well.

M. Lucas observes, that his employer, the court gardener, M. Seitz, acknowledged the importance of the use of charcoal, and will practise a number of systematic experiments upon plants in the open air, in order that a "well grounded opinion on the application of charcoal ashes in general can be formed."

Theory of M. Lucas's Experiments on the Effect of Charcoal in Vegetation.—Dr. Buckner has published an account of the theory of M. Lucas's experiments in the "*Garten Zeitung*," the substance of which we give below, the original article occupying several pages. The experiments of M. Lucas, detailed above, are thought by Dr. Buckner to be very important contributions to vegetable physiology and dietetics, and his remarks are made with a view to introduce a clear scientific notion of the effects of charcoal on vegetable life. These effects are founded, undoubtedly, on several laws, of which the following appear the most important.

1. Absorption of light and generation of heat.—It is well known that bodies receive the light of the sun more perfectly, the darker, duller, and looser they are, and the consequent development of heat is in proportion to the absorption of light. As charcoal dust is one of the darkest, dullest, and most porous of bodies, it must, on account of its peculiar capacity of receiving the sun's light and changing its heat, be particularly favorable to vegetable life.

2. Absorption of atmospherical air.—Among all porous bodies that have the capacity of absorbing gases and vapors, charcoal has been proved, by numerous experiments, to hold the first rank. Modern physiologists are, for the most part, of opinion that plants can receive no solid nourishment from the earth, that is, that every thing they can assimilate (or digest) must be in a liquid and gaseous or vapory state. If we, therefore, meet with silicious earth, chalk, magnesia, oxide of iron, in short such substances in plants as could only be received from the soil, we may always consider it certain that

these sorts of matter can only be absorbed by the roots in proportion as they are in a fluid or dissolved state in the soil. These sorts of matter, and particularly the different organic salts which we find in the ashes of vegetables, are not actually to be considered sources of nourishment, but stimulants to assist in digestion, as salt and spice are to the higher animals and man.

In connection with the subject Dr. Buckner introduces a treatise by M. Payen, read before the Academy of Sciences at Paris, on the 8th and 14th October, 1839, viz:—that charcoal operates as a condenser, under the influence of water, on the constituent parts of the air, in the same manner as spongy platina on the elements of detonating gas; so that nitrogen and oxygen are dissolved, and, mixing with water, are absorbed by the spongioles, and carried to the cambium for assimilation. This property of condensing the air, and making it fit to be received by plants, does not exclusively belong to charcoal; but charcoal powder appears to possess this power in the highest degree, consequently, besides light and heat, is capable of carrying to the roots both air and water, i. e. nitrogen, hydrogen and oxygen, in the greatest abundance.

3. Decomposition of the charcoal, and formation of a nourishing substance for plants.—For a long time it was generally believed that charcoal, as an inanimate body, incapable of decay, contributed in no degree to the nourishment of plants, and that charcoal dust could only serve at most to make the earth looser and warmer. But M. Lucas found from his experiments, that the charcoal, in which plants grow, by degrees undergoes decomposition, and at last becomes a sort of humus. This obviously takes place merely because the charcoal dust acts as humus, and with the co-operation of water and air, continually gives out to the plants oxide of charcoal, or carbonate, together with the saline particles which are in the charcoal and remain in the ashes after burning. But to prove this, some chemical experiments were necessary.

4. Comparative chemical examination of charcoal dust.—The more perfectly to establish the theory of the effect of charcoal on vegetation, M. Lucas gave me for examination,

1st. Ashes of fir [or pine] charcoal, in which no plant had grown.

2d. Ashes of fir charcoal, in which plants had been grown for half a year. [This was used for most of the experiments.]

3d. A portion of charcoal dust which had been used for another purpose for two years, [to fill up a bed for plunging in plants.]

With these materials Dr. Buckner made the following experiments, which we extract entire:—

Two drachms of them were reduced to fine powder, and digested in three ounces of distilled water for twenty-four hours. All the three quantities, filtered off from the charcoal, were uncolored, and left the test paper unchanged. After the evaporation of the water, there remained only a very trifling yellowish residuum, of a saltish taste, which acted somewhat like an alkali, and, besides potash, contained also chlorine. No difference could be distinguished in this case between *a*, *b*, and *c*.

The portions of charcoal powder to which water had been applied, were each separately digested in a sand-bath, with three ounces of water, to which a drachm of corrosive lie of potash was added. The liquid filtered from *a* was almost colorless, and was not the least muddy when saturated with muriatic acid. The liquid from *b* was brownish, and with muriatic acid yielded a flocky dark brown precipitate of humic acid, which, being carefully collected and dried, weighed 0.27 grains. The liquid from *c* was of a darker color, and, with muriatic acid, yielded 0.45 grains of humic acid.

Two drachms of each of the three portions of charcoal were reduced to ashes in the platina crucible. The ashes of *a* weighed twenty-two grains, and lost, by shaking with distilled water, one grain in weight. The ashes of *b* yielded only nine grains of ashes, of which only half a grain was dissolved by the water. The ashes of *c*, on the contrary, weighed thirty-three grains; apparently because the charcoal powder, while in use for two years, had become fouled with garden mould; of these thirty-three grains of ashes, two grains were dissolved in water. The constituent parts of the three portions of ashes retained their qualities; so that in the dissolved parts were found potash, chalk, carbonic acid, sulphuric acid, muriatic acid, and phosphate. The portion indissoluble in water contained chalk, magnesia, traces of oxide of iron, carbonate, sulphuric acid, phosphate and silicic acid.

If the objection be made, with respect to these three portions of charcoal, that they are not all from the same tree, and might therefore yield a different weight of ashes, we may, with probability, suppose that this natural difference is very inconsiderable, as the charcoal was all of fir wood from the neighborhood of Munich, where limestone *débris* is the general understratum of the woods.

The result is quite decisive and undisputed, that diluted lie of potash scarcely ever dissolves any thing from fresh fir charcoal, and that, on the contrary, charcoal in which plants have grown, being partly changed into humus and this being drawn out by diluted lie of potash, amounted in the charcoal *b*, after six months' use, to 2.25, and in the charcoal *c*, after being two years in use, to 3.75 of 1000. By this it is also proved, that charcoal, under the influence of light, air, water, and vegetation, is gradually decomposed, by losing carbon; in the place of which hydrogen and oxygen predominate, and concur with the remains of carbonate to form humic acid.

No less interesting is the further comparison of the ashes of, I may say, the virgin charcoal *a* and the charcoal *b*, which had been

used half a year for vegetation; in this instance *a* and *b* were in the proportion of 122 to 75 of ashes from 1000 of charcoal. Undoubtedly the dissoluble salts were, in proportion to the increasing decomposition of the charcoal, absorbed by the roots. That the greater weight of the ashes of *c* is not decisive, has been already mentioned. To make very correct experiments of this sort, charcoal from the same tree should be burnt, equally reduced to powder, and, in planting in this powder, all impurities of garden mould, &c., carefully avoided, and watering the plants with rain water attended to.

5. Antiseptic power of charcoal.—The antiseptic powers of charcoal are of great importance, for it has very little power of retaining water, and the little it retains is partly absorbed by the roots and partly evaporated. This property deserves the greatest attention of gardeners, in respect to the recovering the health of plants, the roots of which have become injured by being in a clayey soil, and too freely watered, or after continued rain, or being in contact with manure not sufficiently decomposed. They should be immediately transplanted into charcoal powder, as the most effectual method of cure.

In concluding this article, which we have condensed as much as possible, and at the same time preserve all the necessary information, in order that our readers may understand the experiments and be able to repeat them, we cannot but recommend the trial of experiments by our amateur cultivators of the use of charcoal, in propagating plants, as well as in renovating sickly and diseased ones. No particular care is necessary, nor are we aware that there is any material difference in the qualities of charcoal: oak, maple, and pine are often brought to market together, and may be obtained in mixture, or may be separated and used by themselves after they have been powdered. As we understand it, the only care is to powder and sift the charcoal, using only the dust which may be put into a box or pot, as is usual with common soil, and the cuttings inserted. We shall institute some experiments ourselves, and give the results in our pages. Those of our friends who may adopt M. Lucas's plan, will, we trust, keep some record of their operations, and send us an account of them. A list of the plants experimented upon,—the length of time which they required to root, and other particulars connected with their growth, would be interesting, and furnish some data by which others might be guided in further experiments.

ART. IV. Floricultural and Botanical Notices of new Plants figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

The Gardener's Chronicle, a stamped newspaper of Rural Economy and General News. Edited by Prof. Lindley. Weekly. Price 6d. each.

Floricultural and Botanical Intelligence.—Our botanical and floricultural friends are referred to the first article in the present number, communicated by our correspondent, Mr. Teschemacher. The list contains many new and interesting plants, and it is gratifying to learn that so large a number of them have already appeared above ground. We shall look forward with considerable interest to the notices and descriptions of those which flower, which will, by the kindness of Mr. Teschemacher, be communicated through our pages.

New species of *Rubus* (or Raspberry).—We have been presented by George B. Emerson, Esq., with a few seeds of a new species of *Rubus*, which was discovered in the Sandwich Islands by the United States' Exploring Expedition. The seeds were brought out by Capt. Couthouy, who was attached to the expedition, and who lately arrived at this port from Tahiti, where he left the squadron composing the expedition.

The following note, from Mr. Emerson, accompanied the seeds:—

“Dear Sir,—At a late meeting of the Boston Society of Natural History, Capt. Couthouy presented to the Society a few articles which he had brought with him from the Sandwich Islands and other places, and amongst them some seeds of a

raspberry, the fruit of which he says is sometimes five inches in its largest circumference. As it grew at an elevation of eight thousand feet above the ocean, it may possibly flourish in our climate; and as I know the great interest you take in the propagation amongst us of choice fruits, whether of foreign or of native origin, I send you some of the seeds, hoping that you may be induced to attempt to make them grow. I also send some seeds of a tree, probably an acacia, or certainly some leguminous plant, which was found in the same region.—*Respectfully yours, Geo. B. Emerson, June 2, 1841.*”

[We have had the seeds planted with great care, and shall report hereafter upon the progress which they may make towards the development of fruit. If this species should unfortunately prove too tender for our climate, it may still be valuable as a parent, from which to raise new kinds by hybridization with the hardier sorts. The size of the former will be added to the hardiness of the latter, and probably form a new and fine fruit.—*Ed.*]

New Verbenas.—Some new and fine additions to this beautiful family have been lately made. A correspondent from Baltimore writes us that “several fine new verbenas have been produced lately, among which is one very fine compact pale pink; one of a salmon color, with a regular and beautiful corymb, of vigorous habit, and an excellent flower: another of bluish purple, compact and long corymb, expanding well, with foliage like the white. These verbenas are distinct from any grown before.” Our friend has kindly promised to send us some plants, from which we shall draw up descriptions for our pages, as soon as they have flowered sufficiently to show their habits. Hovey & Co., whose collection of the verbenas embraces every good kind, have likewise raised three new ones, two of which possess much merit: one is a dark purple, the other a pale pink, but a most abundant bloomer. We shall name and describe them hereafter.

Calceolarias.—Some exquisite seedlings have been, and still continue, we believe, in flower at the Public Garden. We noticed, in particular, one or two pale yellows delicately spotted, which were very distinct and beautiful. This pretty tribe of plants is worthy of extensive cultivation.

New Seedling Camellia.—Our correspondent, Dr. J. S. Gunnell, of Washington, who has been fortunate in the production of several new varieties of the camellia, and the intro-

duction to notice of those raised by him, some of which have been described in our pages, has sent us the annexed description of a new seedling, raised by his friend J. I. Fobel, Esq., of Virginia:—

“*Caméllia japonica* var. John Tyler.—I have raised another new seedling camellia, which I have named after his Excellency John Tyler, our President. *Caméllia japonica* var. John Tyler has foliage about the size of the old striped camellia, but the leaves are flat like conchiflora, the pericarp is green, and the flower is of the purest *deep pink*, or light rose color, which color, as well as the flower, is very persistent; it has twenty-six large heart-shaped petals, and fifteen small ones, with a few anthers; it is three and a half or four inches in diameter. This is a very magnificent variety. I have put the above camellia in the hands of my friend Dr. J. S. Gunnell, of Washington city, D. C., for propagation and sale.—*Respectfully yours, John I. Fobel, Fairfax county, Va., April, 1841.*”

Caméllia var. *Wilderi*.—We are happy to have it in our power to say that the safety of this fine variety is placed beyond all doubt, (with the exception of casualties which may hereafter take place.) A graft which was inserted in a strong and vigorous stock now shows signs of a perfect union, and the commencement of a new growth. It will be gratifying to those of our friends who feared the total loss of this fine variety, to learn that it has been saved by the accidental circumstance of a single graft.

New seedling Camellias.—In the report of the Pennsylvania Horticultural Society, in our last, (p. 233,) two seedling camellias were noticed as having been exhibited before the Society. Since then, the report of the Committee on Plants and Flowers has been received, in which the seedlings are described, and the Society's premium awarded, as the best seedlings exhibited. They are thus described:—

Caméllia japonica var. *Binnevi*.—A very vigorous shrub; leaves thick, three inches broad and five inches long, ovate, acuminate, much dentated, veined, somewhat rugose, of a dark green; petioles rather short; bud ovate, with pale green scales; flower four inches and a half in diameter, full; petals slightly crenated at the summit, regularly and gracefully imbricated from the centre, very numerous, those at the circumference, with a few of the adjacent rows, and also several of the rows at the centre unicolorous, of a clear cherry red,

No. 1 (Berlèse's *Monography*), but those intermediately situated gradually assuming from near the margin a lighter tint, approaching a silvery whiteness towards the claws; texture very delicate and chrystalline; bears close inspection.

Camellia japonica var. *Hempsteadii*.—A shrub of vigorous growth; leaves two and a half inches broad, and four inches long, oval, somewhat acuminate, dentated, distinctly veined, of a deep green, closely set upon the plant; petioles quite short; flowers large, about four and a half inches in diameter, full, of a clear cherry red, No. 2 (Berlèse *Monography*;) petals veined with deep cherry red, entire, cupped form at the opening of the flower, but recurved when fully expanded, regularly and handsomely imbricated, numerous.

The Committee add, "with regard to the premium to be awarded on the present occasion for the best seedling camellia, your Committee have to state, that they have examined a number of specimens shown at the stated meetings during the season specified, among which, those two presented at the last stated meeting in particular were the most meritorious.

Your Committee have no hesitation in awarding the premium for the seedling propagated by John B. Smith, being decidedly the best, and a variety of the very first stamp, which he has named *Binneyi*, in honor of the President of the Society.

Your Committee, to express their gratification, in having two seedlings of so much merit produced in one season, and as an encouragement for the skill evinced, recommend that an honorary premium of four dollars be awarded to Ritchie & Dick, for the other seedling camellia named *Hempsteadii*, shown at the last stated meeting; which is indeed a very fine variety, and for which your Committee, under ordinary circumstances, would have been content to have granted the premium for the best."

We should be glad to hear from Mr. Smith and Messrs. Ritchie & Dick, in relation to their seedlings, with some information respecting their parentage.—*Ed.*

Pæonia albiflora var. *Pottsii*, and *P. edulis* var. *Reevesii*.—Some errors have been made in regard to the names of these two new and beautiful varieties of the pæony, in the English publications, which have given rise to considerable discussion among those of our amateurs who have them in their possession, relative to the identity of the flower, with those

under the same names in English gardens. It will be recollected, by those who are conversant with the English floricultural and botanical publications, that the two above varieties of pæonies have been figured in them, and each represented with very dark or crimson flowers. In Paxton's *Magazine of Botany*, Vol. I., p. 197, is a drawing of *P. var. Reëvesii*, where it is stated to be of a deep crimson color, full of petals, and symmetrically disposed, and that it is a "sterling sort, and well worth cultivation," which every lover of the pæony, who has seen the plate, will readily agree to. Under the impression that Paxton's figure was correct, taken as it was from a plant which flowered in the collection of Mr. Tate, who imported it from China, it was imported into our gardens, but when the plant came into flower it proved to be *pale blush*: it was then supposed that there was some error, in sending the wrong kind, but subsequent importations from the best sources have not been any more successful in getting Mr. Paxton's *deep crimson Reëvesii*. Believing, as we did, that so great an error could not well be committed, we adhered to the opinion that the blush *Reëvesii* was not true; and in conversation with our friend Mr. Cabot, of Salem, he assured us that he had imported it from two different sources, and that it was the true *Reëvesii*. We in consequence requested him to send us a specimen flower of *P. var. Pótsii* and *Reëvesii*, that we might judge for ourselves, our plants of the latter not being strong enough to flower well. With it we received the following note:—

I send you specimens of *Pæonia albiflora var. Pótsii*, and *P. edulis var. Reëvesii*, both fine plants, imported from London.

Pæonia var. Pótsii is the *dark crimson* one: as such, it was sent me from London, in the spring of 1835, and as such I received it from Mr. Groom, of Walworth, in the spring of 1840. In confirmation of its being correctly named, and of a dark crimson color, I refer you to Loudon's *Gardener's Magazine*, Vol. VII., p. 596, who thus says, "*Pæonia albiflora var. Pótsii*, a *splendid crimson* flowered garden variety, originated in China, whence it was brought to the Horticultural Society by the late Mr. John Potts, after whom Mr. Sabine named it."

Pæonia var. Reëvesii is of a *light rose* color: the largest of the specimens now sent, is from a strong plant received from London in the spring of 1835; the other is from a weak-

er plant received from Mr. Groom, of Walworth, in the spring of 1840.

Póttsii has also been imported from London into this city at two different times, from different sources, by another individual, who both times received as such the *crimson colored* variety.

Under these circumstances, with the authority of Loudon to confirm me, I am inclined to believe, although differently figured in another floricultural publication, that the *true* Póttsii is of a dark crimson color.—*J. S. C., Salem, June 16, 1841.*

This, however, did not fully induce us to alter our opinion; but a day or two after the receipt of the above note, while making some remarks to our correspondent, Mr. Wilder, upon the subject, we were led to the conclusion that Mr. Cabot was correct. Mr. Wilder imported the Reèvesii two years since, and last season expected to be delighted with a display of its large deep crimson blossoms; but what was his astonishment, when they opened, to find them pale blush or flesh color; still beautiful, but not so gorgeous as he had expected. He immediately wrote out to Messrs. Chandler & Sons to make inquiry into the error, and the following is their answer to that portion of his letter:—"With respect to the *Pæonia Reèvesii*, we beg to observe that it is the true Reèvesii, (flesh color:) the dark one is Póttsii, and it has been figured in some of the botanical publications under the name of Reèvesii."

The periodical alluded to is Paxton's *Magazine*, which fully explains the matter. Póttsii is figured in the *Botanical Register*, Vol. IV., plate 1436, but the figure is quite unlike Mr. Paxton's, the latter being larger, fuller of petals, and of a deeper color, considerably exaggerated, while the former does injustice to the flower. We did not rely much upon Mr. Paxton's botanical accuracy; still we did not think that when Póttsii had been figured only a year or two previous, he would have presented it to the public under another name, and not correct the error, to our knowledge, even to the present time. We have thus been particular, in order to unravel the errors which have been made in regard to the varieties. Both are beautiful additions to the flower garden. Póttsii is not very double, but of a deep crimson. Reèvesii very double, well formed, and of a flesh color. They flower at the same time as the Whittlèji, Hùmei, &c.—*Ed.*

ART. V. *Notes on Gardens and Nurseries.*

Mr. Walker's Tulip Show—May 29. Our readers have already been informed by Mr. Walker himself, whose note appeared some time since, (p. 157,) that his collection of tulips was opened to the public without charge, and all lovers of flowers were invited to "Come, and welcome." We are happy to learn that the invitation was so generally accepted, and that Mr. Walker's tulips, which were more numerous, and embraced a greater variety than ever, were inspected by so great a number of amateurs, florists, and cultivators. It cannot but be a source of delight and satisfaction to Mr. Walker, to see his labors so highly appreciated. It is no easy work to gather together such a choice and well selected bed of tulips. It requires years of attention to the subject, and much sacrifice of time and patience, to become familiar with the habits, characters, and general properties of the kinds, many of which differ exceedingly from others in their tendency to run their colors, in the rapidity of the increase of their roots, their height, and their weak or strong growth, requiring a peculiar soil or a peculiar situation to preserve them. Most of these obstacles in the way of him who would be a successful grower of the tulip, Mr. Walker has overcome, and he has now a collection which may be considered equal to many of those of the first fanciers in England.

The past spring was a very unfavorable one for a fair bloom. The tulips made their appearance above the ground very early, owing to the mild winter and the little frost in the ground: but the cold weather of April, and unusually great quantity of rain which fell during that month and the early part of May, very much retarded their growth; the buds were continually deluged with the wet, which always lodges in the foliage when the tulips are just above the ground, and undoubtedly did many of them exceeding injury: when the warm weather of the latter part of May set in, the buds were forced into bloom before they were fully formed; the consequent prematureness of the bloom, rendered many of them inferior: add to this the continued hot weather of May, with a dry air and scorching sun, and many of the flowers began to fade before they had fairly opened. Such an unfavorable season has not occurred since Mr. Walker has cultivated the tulip.

Mr. Walker continues to add to his already extensive list, and he pointed out to us several new ones of last fall's importation, and bloomed for the first time here this season: some of them were extremely beautiful. We have not time to give any description of the flowers, but merely name the following, which were fine varieties, with clear grounds and well feathered colors.

Bybloemens.—Black Prince, Blanche Violette, Duchess of Wellington, Duke of Sussex, Hugobert, La Mere Brune, Madame de Staal, Margrave de Baden, Prince Regent, Reine des Fleurs, Violette Remarkable, Black Emperor.

Roses.—Aglain, Comet, Duchess of Kent, High Admiral (splendid,) Juno, Lavinia, Maria Theresa, Sisymbria, Fair Helen.

Bizarres.—Alfred, Cardinal, Cassius, Commander in Chief, Gouda

Bears, Languedoc, Leopoldina, Lord Cochrane, Newington Beauty, Othello, Orestes, Platoff, Selkirk, and Gen. Harrison.

We should not forget to mention that Mr. Walker showed us a fine bizarre of his own growth, which broke into color last season, and was placed in the old bed for the first time, in the fall. He has named it Gen. Harrison. It has a clean yellow ground, and is most delicately feathered with dark brown; the petal is not of the first character, or we are inclined to think it would rank as high as any bizarre in cultivation: it may improve another year.

Mr. Walker cultivates about two thousand bulbs in three large beds, one of which, the most select, is protected by the awning which he has described in his excellent article at p. 186. The flowers of those without any shade were literally burnt up by the sun in a few days. Our friends who are desirous of possessing a fine bed of tulips, are referred to Mr. Walker's advertisement: they may rely upon having a good selection of kinds, at very low prices.

The collection of Tulips in the Public Garden.—The tulips which flowered in the Public Garden were obtained from Mr. Groom, the celebrated florist and tulip fancier, at Walworth, near London. Mr. Groom has long been a cultivator of this flower, and has broken some new and choice varieties, and his collection is said to be one of the best in the kingdom. He has taken many prizes at the Great Hampton Show.

The bed contained about one thousand bulbs, and among them we noticed some which we never saw in better perfection. The same causes which we have enumerated in our remarks above, also much diminished the beauty and general appearance of the bed. There was, however, a sufficient display to show the choicest of the collection. The bulbs were well grown, and the colors as little run as any we ever saw. They were planted in the same bed in which Mr. Walker's were grown last year.

We went over the bed carefully, and were highly pleased with many of the varieties, some of which are not to be found among Mr. Walker's. Among the latter we mention the following as possessing excellent properties:—

Bybloemens.—Holmes's Baguett, Lewald, Laomedon, Ne Plus Ultra.

Rose.—Lady Crue, Catharine.

Bizarre.—Milo, Albion.

Polypheumus, one of the most superb bizarres, was flowering most splendidly: there were two bulbs in the collection, only one of which came true; but it was a flower which would not be forgotten among a thousand by the most careless observer. Many of the same varieties we have enumerated in Mr. Walker's list were also in flower, in equal, and, in some instances, greater perfection.

We were glad to learn that the show, though cut short by the extreme hot weather, was well attended, and the flowers greatly admired. The taste for the tulip is evidently increasing, and when a few more seasons shall have passed, and such brilliant displays have prepared the public to fully appreciate the beauties of the flowers, we hope that we shall be able to announce the existence of many select amateur collections of the tulip, as well as the very general cultivation of the bulbs.

REVIEWS.

ART. I. *Torrey and Gray's Flora of North America*. Vol. II., No. 1. New York, 1841.

NUMBER first of volume second was published at the end of May, and contains the *Caprifoliaceæ*, *Rubiaceæ*, *Valerianaceæ*, *Dipsacæ*, and a considerable part of the *Compositæ*, including *Vernoniaceæ*, *Eupatoriaceæ*, and most of the genera of *Asteroidæ*. We are glad to see that the authors have reduced many of the genera into which the old genus *Aster* has been divided by the European botanists, with little regard to any principle or system. In the genus *Aster* and the allied genera, they have had the advantage of the vast collection of Sir William Hooker, sent over the Atlantic by that munificent botanist, for their use, and they have endeavored, and, we believe, with great success, to do all that was possible to determine and settle the multifarious species and varieties of that most difficult genus. As the work proceeds, it increases in accuracy and fullness of detail, and we would particularly refer to the order *Rosaceæ*, in the last number before this, as a specimen of a most successful revision and description of an interesting and important as well as difficult order.

Very few botanists can form an adequate conception of the immense amount of time, expense, and most various and perplexing labor employed in the collection of the materials for this work, or of the patient and persevering care, as well as knowledge and sagacity, required in working up the materials into the state in which they are presented to the public. Though published in as cheap a form as possible, it is printed with great beauty and accuracy, with a light and elegant type, and is a credit to the New York press.

This Flora is in every respect entitled to the character of a national work. It is the only American work of the kind adapted to present use, and its materials have been accumulated by the silent labors of a vast number of botanists, for many years, and a great part of these materials are now published for the first time. In no similar publication, in any country, has more labor and care been expended upon the determinations, comparisons, and references of the species; and executed as it is, by native American botanists, we may

point to it with pride and pleasure, and without fearing to compare it with any transatlantic work of the kind. Under these circumstances, it might be expected that the American public would extend to it the usual support and encouragement which it has generally given to works of a national character, yet, we regret to say, the number of its subscribers is at present scarcely sufficient to defray the expenses of its printing. It cannot be expected that a sufficient sale can be found among botanists only, many of whom feel unable to purchase it, and it ought to look for support to those, who are always ready to encourage a meritorious national work, whether it is immediately connected with their own pursuits or not. It will scarcely be believed that its excellent publishers in this city only supply twelve copies to subscribers and purchasers, of whom only seven are inhabitants of Boston; but we feel confident that very many of its citizens only need to understand the claims of the work, and an opportunity to become subscribers, to manifest their usual and well known public spirit and liberality. O.

ART. II. *A Treatise on the Theory and Practice of Landscape Gardening, adapted to North America, with a view to the improvement of country residences; comprising Horticultural Notices and general principles of the art, directions for laying out Grounds, and arranging Plantations, the description and cultivation of hardy trees, decorative accompaniments to the house and grounds, the formation of pieces of artificial water, flower gardens, &c., with remarks on rural architecture; illustrated by engravings.* By A. J. DOWNING. 1 vol. royal octavo; 451 pages. New York, 1841.

If there was any evidence wanting to show the rapid increase of horticultural taste in this country, none could be better given than the simple fact of the publication of three works devoted wholly to, or bearing upon, the subject of gardening, in the short space of one month, viz., the work at the head

of this article, Lindley's *Theory of Horticulture*, and Liebig's *Organic Chemistry*, not to mention some other works already in press, and to be issued in the course of the season. But we take it for granted that no evidence is needed to verify our statement. The simple fact that in the vicinity of our large cities, as well as throughout the country generally, villa residences are springing up, with improved styles of architecture, and elegant gardens, and highly ornamented grounds attached, is sufficient proof to the most indifferent observer. Go back fifteen years, and compare that period with the present. We would even shorten the time, and carry the reader back but ten years, and see how great has been the progress in gardening every where; at the period of our first date, very few green-houses or graperies, and but a few fine gardens existed in the country. Within ten years, all those establishments, which now carry off the palm for the elegance of their structures, and for their rich collections of plants, have been built up.

Nearly seven years have passed away, since we commenced the labors of our Magazine. How quick the time! and yet how much has been accomplished in gardening during that period. We have in our mind's eye, collections of plants, the richest and most valuable in the country, conservatories and green-houses the most splendid which have yet been seen here, and vying in extent with those of many of the aristocracy of England, which date their existence but little more than a year previous to the existence of the Magazine; and how many collections of less extent, and houses less lofty and of lighter structure have been erected within the past five years. Had not embarrassments, of no ordinary kind, attended the commercial world, bringing about those fluctuations which create imaginary wealth, only to be followed by others of corresponding poverty, such a rapid advancement of rural taste, and love of gardening pursuits, would have taken place, as has never been equalled, even in the palmiest days of the art in England, where gardening has attained such a high state of perfection.

But we are not confining ourselves closely enough to our subject, and we shall not, we fear, be able to do Mr. Downing justice, even with all the space we have, unless we adhere strictly to this work.

The work is divided into the following subjects:—Historical Sketches—Beauties of Landscape Gardening—Woods and Plantations—Deciduous Ornamental Trees—Evergreen

Ornamental Trees—Vines, and Climbing Plants—Treatment of Ground—Formation of Walks—Treatment of Water—Landscape and Rural Architecture—Embellishments, architectural, rustic, and floral. Appendix.

The historical sketches are interesting, and include brief notices of the progress of landscape gardening throughout the country. The next chapter, on the Beauties of Landscape Gardening, is one of the most valuable; the hints relative to what landscape gardening consists of, are well drawn, and must be read with great profit by every individual who wishes to improve an old place, or lay out a new one. As an imitative art, its nature and principles are fully explained. With a study of this portion of Mr. Downing's book, we are persuaded every planter will be able to effect great improvements in his grounds. Beautifying a residence does not consist in merely setting out trees, but rather in planting them in such situations as will give the greatest *expression* to the scene. We have, in our earlier volumes, given many extracts from Mr. Loudon, (who has been studied by the author,) on this subject, from which we hope our readers have been benefitted. Our limits will not allow us to extract any portion of Mr. Downing's remarks here.

The most important chapters, to the majority of readers, will be those on deciduous and evergreen trees, in which nearly every hardy kind is described, and its uses in the arts and sciences noticed, together with the poetical allusions; a great variety of the most valuable trees, among which are the various species of the noble oak and the lofty elm, are so described as to enable almost any individual to select such trees as he wishes to plant, and thus save him the trouble of asking the opinion of those, who perhaps, having no better information, give a list of such as are not at all fitted for the purpose. We cannot follow the author through all his subjects, and must therefore refer at once to the chapter on Rural Architecture, as offering the most useful information, and supplying some of the best models for dwellings which has ever yet been given to the American public.

And here the author, in the commencement, makes the following judicious remarks upon the prevalent style of erecting villa residences: "With respect to this class of dwellings, (alluding to city residences,) we have little complaint to make, for many of our town residences are highly elegant and beautiful. But how shall we designate that singu-

lar perversity of taste, or rather total want of it, which prompts the man, who under the name of a villa residence, puts up, in the free, open country, amid the green fields, and beside the wanton gracefulness of luxuriant nature, a stiff, modern, 'three story brick,' which like a well bred cockney, with a true horror of the country, doggedly seems to refuse to enter into harmonious combination with any other object of the sceue." Yet, as the author further remarks, "huge combinations of boards and shingles, without the least attempt at adaptation to situation, and square masses of brick, stand up here and there in the verdant slopes of our village suburbs, appearing as if they had been transplanted by some unlucky incantation from the close-packed neighborhood of city residence, and left accidentally in the country." Such is too frequently the case, and will continue to be, until gentlemen who intend to build, consult books on landscape gardening and architecture more closely, and employ a good architect to carry their wishes into execution.

The last chapter is devoted to Rural Embellishment, the structure of floral and rustic ornaments. Very few persons are aware how much their gardens may be improved by the introduction of Maltese or marble vases, rustic seats, &c. These, when placed in appropriate situations, add greatly to the interest of the garden. The chapter is illustrated with several engravings, giving representations of various kinds of rustic seats, moss houses, &c, from which the reader may gather ideas of the mode of building the same.

We had intended, with the permission of the author, to have given our readers one or two engravings from his work; but those which we should select are residences of which we have in view more detailed notices of the grounds, Mr. Downing's being mere representations of the places, without any particular descriptions. These will appear in some early number, probably in September or October.

In conclusion, we must not omit to remark, that Mr. Downing has given us an excellent volume, and, we might add, for a pioneer in the great art of landscape gardening, in this country, one which will be the means of placing the art at once upon a sure footing. Every country gentleman, or possessor of a cottage or villa residence, should read it, if he has the least taste or desire to embellish his grounds.

The work is got up in elegant style, is printed on a beau-

tiful type, upon fine paper, and illustrated with a great variety of superb engravings. Taken altogether, it is one of the neatest specimens of the typographic art which we have ever seen in this country, and fully equal to many of the costly works which are issued from the London press.

ART. III. *Address delivered at the annual meeting of the Boston Natural History Society, Wednesday, May 5, 1841.*
By J. E. TESCHEMACHER. Pamphlet, 8vo., pp. 46.
Boston, 1841.

THE Boston Society of Natural History is one of the most flourishing of the kind in the country. It has published a journal of its proceedings, already comprising three or four volumes, and containing, among other subjects, many valuable contributions to the botany of New England. The Society has a rich collection of shells, minerals, insects, zoological and botanical specimens, and its hall is thrown open to the public every Wednesday. The annual meeting was held in May, at which time this interesting address was delivered, and subsequently published at the particular request of the Society. Mr. Teschemacher is an ardent student of natural history, and his address shows that he is familiar with all its branches. The progress of geology, conchology, entomology, ichthyology, botany, &c., are passed over in rapid review, and the improvements and divisions which have been made in the several branches, are given in a condensed and concise manner. It possesses the merit of being highly descriptive, without the technicalities which generally render such addresses tedious to all except the student. Written amid the care and labor of business, we cannot but wonder that Mr. Teschemacher should have found time to have collected so much interesting matter in so small space.

Had we the room to spare, we would gladly make one extract, so happily does it answer the question so frequently asked—Of what use is all this science? But we must refer our readers to the address itself, assured that they will rise

from its perusal with their minds more strongly impressed with the importance of the study of natural history.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Massachusetts Horticultural Society.*

Saturday, May 8th.—An adjourned meeting of the Society was held this day,—the President in the chair.

It was voted that the sum of three hundred and sixty dollars be appropriated for premiums the present year, and that the said sum be apportioned among the several committees, as follows: the Committee on Flowers one hundred and fifty dollars; the Committee on Fruit one hundred and fifty dollars; the Committee on Vegetables sixty dollars.

The President read a letter from Rev. G. B. Perry, stating that he had sent to the Society, scions of the Wyncoop apple, and it was voted that Mr. Perry's letter be published in the usual manner, and the thanks of the Society presented to Mr. Perry, for his acceptable donation of scions. Meeting dissolved.

Exhibited.—Native Plants:—From B. E. Cotting, ten species. From E. Weston, Jr., and F. Parker, eight species.

May 15 and 22.—A quantity of native plants were exhibited from B. E. Cotting, at each meeting.

May 29.—*Exhibited.*—Flowers:—From S. Walker, twelve varieties of fine tulips. From J. L. L. F. Warren, bouquets. From T. Mason, a variety of geraniums. From Hovey & Co., bouquets.

Native Plants:—From B. E. Cotting, thirty species. From E. Weston, Jr., and F. Parker, a variety of native species.

Fruit:—From J. L. L. F. Warren, Pearmain and Wellington apples.

June 5.—A stated meeting of the Society was held this day—the President in the chair.

The new Constitution reported at the last stated meeting came up for its final acceptance. It was taken up in sections, and after some discussion was adopted as the constitution of the Massachusetts Horticultural Society.

It was then voted, that the committee chosen for the purpose of publishing the proceedings of the Society, be requested to publish the new constitution and bye-laws, and also a catalogue of the books in the library of the Society, and that the library committee be requested to furnish that committee with a list of the books.

William McIntosh of Boston, and William B. Kingsbury of Roxbury, were admitted subscription members. Adjourned two weeks to June 19th.

Exhibited. Flowers:—From John A. Kenrick, a fine variety of azaleas, *Pæonia Moultan* papaveracea, and *p. var. Banksia*; several herbaceous pæonies, double white and the scarlet hawthorn, the latter very beautiful; flesh colored and common horse-chestnut, *Halæsia triptera*, *Magnolia cordata*, early white Italian, and the red Tartarian honeysuckle, &c. From Hovey & Co., bouquets.

Native Plants:—From B. E. Cotting forty species of native plants, among which were three species of *Convallaria*, three of *Viola*, and two of *Prunus*. From E. Weston, Jr. and F. Parker, twelve species.

Vegetables:—From S. Walker, twelve stalks of rhubarb, weighing six pounds and three quarters, also fine asparagus and well grown. From J. L. L. F. Warren, a bundle of stalks, also of good appearance, and one bunch of asparagus.

June 12.—*Exhibited.* Flowers:—From W. E. Carter, *Dictamnus fraxinella alba* and *rubra*, pæonies, *Lilium japonicum*, yellow Harrison rose, and bouquets. From Messrs Winship, a great variety of cut flowers, both hardy and tender, among them some beautiful specimens of the Fringe tree, which should be cultivated by every one who loves an ornamental shrub. From John Hovey, bouquets. From S. Walker, pinks, double rockets, ranunculuses, Harrison rose, and large bouquets. From Capt. George Lee, a neat and pretty bouquet, with some rare flowers for the season. From J. L. L. F. Warren, bouquets.

From W. Kenrick, Scotch roses, pæonies, irises, *Hemerocallis flava*, *Dictamnus fraxinella rubra*, bouquets, and a curious specimen of a horse-chestnut, with variegated foliage, from a seedling tree. From J. A. Kenrick, Scotch laburnum, early white Italian honeysuckles, several varieties of hardy and beautiful azaleas, pæonies, *Magnolia purpurea* and *tripetala*, red and yellow Austrian roses, cranberry tree, phloxes, *Calycanthus florida*, &c. From A. Bowditch, double white camellia, and the blush, yellow, and white tea roses, Noisette Lamarque, undulata, &c.

From Hovey & Co., bouquets. From W. Wales, fine geraniums, viz:—Sylph, Gaines's King, Percy's Queen, Louis Philippe, Prima Donna, Priory Queen, Parker's Triumph, and Garth's Perfection.

Native Plants:—From B. E. Cotting, upwards of twenty-five species, all in good order, and embracing some not very common.

Fruit:—From Capt. George Lee, a dish of fine peaches, picked from a tree in a pot. From C. Golderman, sweetwater grapes. From J. L. L. F. Warren, early Virginia strawberries. From J. S. Ellery, handsome black Hamburg, white sweetwater, and Miller Burgundy grapes.

Vegetables;—From Hovey & Co., two handsome cucumbers, each about a foot in length.

June 19.—An adjourned meeting of the Society was held to-day—the President in the chair.

The President read a letter from D. Haggerston, gardener to J. P. Cushing, Esq., respecting the destruction of the *rose slug*, and expressing his desire to compete for the premium offered by the Society for destroying this injurious insect. The report was referred to the chairman of the Flower Committee, with a request that he re-

port thereon as soon as practicable. [Mr. Haggerston's letter will be found in a preceding page.]

On motion of C. M. Hovey, it was voted, that the Society offer a premium of one hundred dollars for a successful mode of destroying the curculio, which has been so injurious to the plum tree. After this vote was passed, Mr. Haggerston stated that he was requested to place at the disposal of the Society the sum of one hundred dollars, from the hands of gentlemen interested in horticulture, to be added to the amount of the premium offered by the Society, making the whole two hundred dollars, and it was voted that the whole subject should be under the charge of the Fruit Committee. It was then voted that the premiums offered by the Society, with the exception of gratuities, and those offered in connection with T. Lee, Esq., be confined to members of the Society.

The Committee appointed to procure a new plate for a diploma, made a verbal report that they had attended to that duty, and procured the engraving, of which they submitted a copy for the inspection of the members. The report was accepted, and the thanks of the Society were tendered to the Committee for the acceptable manner in which they had discharged their duty. They were requested to procure a sufficient number of impressions for the use of the Society.

The Executive Committee laid upon the table the following reports of the different committees, offering premiums for the present year:—

REPORT OF THE COMMITTEE ON FLOWERS.

PANSIES. —For the best twelve varieties, a premium of	\$5 00
For the best six varieties, a premium of	3 00
For the best seedling flower, a premium of	2 00
PEONIES. —For the best display of flowers, a premium of	5 00
For the second best display of flowers, a premium of	3 00
PINKS. —For the best display of pinks, a premium of	5 00
For the best six dissimilar kinds, a premium of	3 00
For the best seedling, a premium of	2 00
ROSES. —For the best fifty different varieties, a premium of	8 00
For the second best fifty different varieties, a premium of	5 00
For the third best fifty different varieties, a premium of	3 00
For the best display of Chinese and tender roses, a premium of	5 00
For the second best display of Chinese and tender roses, a premium of	3 00
CARNATIONS. —For the best twenty-four varieties, a premium of	5 00
For the second best twenty-four varieties, a premium of	3 00
For the best six flowers of sorts, a premium of	3 00
GERMAN ASTERS. —For the best display of flowers, a premium of	5 00
For the second best display of flowers, a premium of	3 00
BALSAMS. —For the best eight different varieties, a premium of	3 00
For the second best eight different varieties, a premium of	2 00
PERENNIALS. —For the best display of flowers, a premium of	3 00
For the next best display of flowers, a premium of	2 00

ANNUALS.—For the best display, a premium of . . .	3 00
For the next best display, a premium of . . .	2 00
DAHLIAS.—In the following order:—	
Premier Prize.—Six dissimilar blooms . . .	10 00
Specimen bloom.—Best flower of any color . . .	4 00
Second best flower of any color . . .	2 00
Open to all cultivators.	

DIVISION A.

Open to all cultivators of more than two hundred plants.

First Class.—For the best twenty-four dissimilar blooms, . . .	6 00
For the second best twenty-four dissimilar blooms, . . .	4 00
Second Class.—For the best twelve dissimilar blooms, . . .	5 00
For the second best twelve dissimilar blooms, . . .	3 00
Third Class.—For the best six dissimilar blooms, . . .	2 00
For the second best six dissimilar blooms, . . .	2 00

DIVISION B.

Open to all cultivators of less than two hundred blooms.

First Class.—For the best twenty-four dissimilar blooms, . . .	6 00
For the second best twenty-four dissimilar blooms, . . .	4 00
Second Class.—For the best twelve dissimilar blooms, . . .	5 00
For the second best twelve dissimilar blooms, . . .	3 00
Third Class.—For the best six dissimilar blooms, . . .	4 00
For the second best six dissimilar blooms, . . .	2 00

\$150 00

The Committee hope that the increased interest which has been manifested by the public to visit the Society's room, will be reciprocated on the part of the members, by as rich displays as possible, and every individual is invited to contribute.—*C. M. Hovey, Chairman, Boston, June 12, 1841.*

The following rules and regulations will be observed in regard to the dahlia show:—

1. All growers who intend to exhibit, shall signify their intention to the Chairman of the Committee on Flowers, and in which class or classes, at least one week before the exhibition.

2. Any persons may enter for the prizes of any of the classes, in either of the divisions to which they are eligible, but they cannot take more than one prize in either of the two divisions.

3. Each competitor will be required to declare that every flower exhibited by him is of his own growth, or has been grown under his care.

4. The judges for awarding the prizes in the first division, shall be selected from such cultivators or connoisseurs as are not competitors in that division; and the same rule shall be observed in selecting judges for the second division.

5. The judges to be appointed by a majority of the exhibitors, whose decision shall be final, and to be chosen at the Society's room on the first Saturday in September, at twelve o'clock, noon. Notice of this meeting to be given by the Chairman of the Flower Com-

mittee to such persons as have signified their intentions of competing for the premiums.

6. Each competitor shall give to the Chairman of the Flower Committee a list of the names of the flowers he exhibits, sealed up, and signed with his name.

7. The blooms shall be shown in bottles provided by the Society, without foliage or any other embellishment.

8. No seedling not sold out, will be allowed to be placed in either of the divisions or classes, except the seedling class; nor must any stand contain two blooms of the same variety.

9. The judges shall sign their award with a declaration upon their honor, that, to the best of their knowledge, they have decided upon the respective merits of the flowers exhibited.

REPORT OF THE FRUIT COMMITTEE.

The Committee on Fruits recommend the following premiums to be awarded for the ensuing year:—

APPLES. —For the best summer apples, not less than one dozen, a premium of		\$5 00
For the best autumn apples, not less than one dozen, a premium of		5 00
For the best winter apples, not less than one dozen, a premium of		5 00
PEARS. —For the best summer pears, not less than one dozen, a premium of		5 00
For the best autumn pears, not less than one dozen, a premium of		5 00
For the best winter pears, not less than one dozen, a premium of		5 00
CHERRIES. —For the best cherries, not less than one quart, a premium of		5 00
For the next best cherries, not less than one quart, a premium of		4 00
PEACHES. —For the best peaches, open culture, not less than one dozen, a premium of		5 00
For the best peaches under glass, not less than one dozen, a premium of		5 00
For the second best peaches, open culture, not less than one dozen, a premium of		4 00
PLUMS. —For the best plums, not less than one quart, a premium of		5 00
For the next best plums, not less than one quart, a premium of		4 00
GRAPES. —For the best foreign grapes under glass, a premium of		10 00
For the best foreign grapes, open culture, a premium of		5 00
For the best native grapes, a premium of		5 00
APRICOTS. —For the best apricots, not less than one dozen, a premium of		5 00
NECTARINES. —For the best nectarines, not less than one dozen, a premium of		5 00
QUINCES. —For the best quinces, not less than one dozen, a premium of		5 00

GOOSEBERRIES.—For the best gooseberries, not less than one quart, a premium of	5 00
RASPBERRIES.—For the best raspberries, not less than one quart, a premium of	5 00
STRAWBERRIES.—For the best strawberries, not less than one quart, a premium of	5 00
For the next best strawberries, not less than one quart, a premium of	4 00
CURRENTS.—For the best currants, not less than one quart, a premium of	3 00
MELONS.—For the largest and best watermelon, a premium of	3 00
For the largest and best muskmelon, a premium of	3 00
Also the further sum of twenty-five dollars to be awarded in gratuities	25 00
	\$150 00

WELLS PREMIUM.

The Committee also offer the Wells Premium for apples, the produce of seedling trees, which shall have been brought into notice since the year 1829:—

For the best summer apples, as above, not less than one dozen, a premium of	\$25 00
For the best autumn apples, as above, not less than one dozen, a premium of	25 00
For the best winter apples, as above, not less than one doz. a premium of	25 00

Premiums to be awarded to the members of the Society only; and where the claims are not of sufficient merit, no premium will be awarded. This will be strictly adhered to, particularly in regard to the Wells premium, where no premium should be awarded but in full evidence of its superiority over some well known fruit of the season.—*Benjamin V. French, Chairman, June 19, 1841.*

REPORT OF THE VEGETABLE COMMITTEE.

The Committee on Vegetables would recommend the following premiums for the year 1841:—

ASPARAGUS.—For the earliest and best four bunches	\$5 00
BEANS.—For large Lima, best two quarts	3 00
BROCOLI.—For the finest four heads	3 00
CAULIFLOWERS.—For the finest four heads	3 00
CELERY.—For the best twelve roots	4 00
CORN.—For the earliest and best dozen	3 00
CUCUMBERS.—For the best pair before the first Saturday in June	5 00
LETTUCE.—For the finest and earliest six heads	3 00
PEAS.—For the earliest and best peck	5 00
POTATOES.—For the earliest peck	5 00
RHUBARB.—For the finest twelve spears	5 00
SQUASHES.—For the finest of the season	3 00
BRUSSELS SPROUTS.—For the finest	3 00

\$50 00

The Committee would say that the premiums heretofore offered for various other articles have been withdrawn, as there were so few specimens offered. The Committee will also give gratuities for specimens of any new or valuable kinds.—*Samuel Pond, Chairman, April 24, 1841.*

Dr. John H. Trowbridge, of Dorchester, and Mr. John Cadness, of Boston, were admitted subscription members. Meeting dissolved.

Exhibited. Flowers:—From John A. Kenrick, *Pæonia* vars. Whittlèji, Hùmei, fràgrans, and Reèvesii; several varieties of roses; larkspurs, phloxes, valerian, and *Hemerocállis lùtea*, *Magnòlia macrophylla* (a fine specimen,) and gláuca, rose acacia, *Wistària frutèscens*, &c., &c. From W. Kenrick, *Pæonia* vars. Whittlèji, Hùmei, fràgrans, carnea (?), ròsea, Reèvesii, albiflòra, and the old crimson; also, several honeysuckles, including Douglàsii, *Hemerocállis flàva*, iris of sorts, Scotch laburnum, Boursault, Scotch, and the yellow Harrison rose, with other flowers. From W. Meller, a variety of fine cut flowers of geraniums, among which were Climax, Lowndes's Perfection, Foster's Alicia, Donald's Perfection, Alarm, &c. &c. From C. Newhall, a variety of roses.

From the President, roses in variety, *Pæonia* var. Hùmei, Whittlèji, and Reèvesii; *Lonicera gràta* and canadèse, and the yellow trumpet, *Saxifraga arbòrea*, *Clématis azùrea grandiflòra* (a new fine kind,) *Gillènia trifoliàta*, and fine double sweet rockets. From S. R. Johnson, a variety of hardy and Chinese roses. From W. E. Carter, *Pæonia* var. Whittlèji, Hùmei, and fràgrans, all superb specimens; also, bouquets and other flowers. From W. Wales, Dorchester, some new geraniums, very beautiful; we noticed among the number, Garth's Perfection, Sylph, Percy's Queen, Joan of Arc, &c., &c. From Hovey & Co., *Pæonia* var. Pótsii and Reèvesii, and bouquets. From J. Hovey, bouquets. From Messrs. Winship, *Pæonia* var. Whittlèji and fràgrans, and a great variety of other flowers.

Native Plants:—From B. E. Cotting, twenty-five species, among which we noticed *Gàlìum aparine* in fruit. From W. Lincoln, Worcester, *Sarracènia purpùrea*, and other native plants.

The exhibition of pæonies took place agreeably to notice at this meeting, and the following is the award of the judges:—

PÆONIES.—For the best display of flowers, the premium to W. E. Carter.

For the second best display of flowers, the premium to W. Kenrick. Messrs. Walker and Haggerston were the judges.

Fruits:—From the President, May Bigarreau cherries, from an imported tree received from France, where the variety originated. From Hovey & Co., a box of Hovey's seedling and early Virginia strawberries. From J. L. L. F. Warren, Methven scarlet and early Virginia strawberries.

June 26.—Exhibited. Flowers:—From J. A. Kenrick, seventy-five varieties of hardy roses, *Magnòlia gláuca*, *Kálmia latifolia*, *Chionánthus virgínicus*, *Pæonia* var. Hùmei, fràgrans, Whittlèji, and Reèvesii, also several bouquets. From J. Hovey, a variety of roses and bouquets. From B. V. French, roses. From O. Johnson, a fine specimen of *Antirrhìnum speciosum*. From W. Kenrick, roses, and a variety of large bouquets. From J. L. L. F.

Warren, roses, dahlias, and bouquets. From A. Bowditch, some fine roses, nereums, and bouquets.

From Messrs. Winship, a great collection of plants, including peonies, honeysuckles, larkspurs, &c. &c., and a fine specimen of that new and elegant shrub, *Deutzia scabra*. From Joseph Breck & Co., some fine roses. From A. H. Hovey, fine rocket larkspurs. From W. Meller, a fine show of pinks, geraniums, *Cereus speciosissimus*, *Epiphyllum Ackermánii*, pansies, *Salvia patens*, calceolarias, and roses. From S. R. Johnson, an excellent display of hardy and Chinese roses; among the latter, some of the yellow teas, and *Triumph d'Arcole*, were very beautiful.

From the President of the Society, a beautiful show of roses; among those very superior, we noticed King of the Hundred Leaves, Henriette Boulogne (perpetual,) Borde Rouge, Athelin, Leas, blush Noisette (moss,) Brenas, Ne Plus Ultra, Mossonia, Gen. Lamarque, George IV., Beaute Ethereal, La Important, Duke of Devonshire, Miralba, Vibert (perpetual,) and numerous others. From Hovey & Co., Ne Plus Ultra, Madame Hardy, George IV., and other roses, also bouquets. From S. Walker, an elegant show of pinks, and some very large and choice bouquets: many of the pinks were seedlings, particularly those which gained the prize as the best six, of which the following are the names,—Walker's Estelle, Sophia, Col. Wilder, Marie Louise, Miss Simmons, and Claudius, and one new one, which Mr. Walker will call Mrs. Paige.

The premium for roses and pinks was awarded this day, according to notice, and the following is the report of the judges:—

Roses.—For the best fifty dissimilar blooms, a premium to J. A. Kenrick.

For the second best fifty dissimilar blooms, a premium to Messrs. Winship.

For the next best fifty dissimilar blooms, a premium to S. R. Johnson.

For the best display of Chinese and other tender roses, a premium to S. R. Johnson.

For the second prize there was no competition.

Messrs. S. Walker and D. Haggerston, judges.

Pinks.—For the best display of pinks, a premium to W. Meller.

For the best six flowers, a premium to S. Walker.

For the best seedling, a premium to S. Walker.

Messrs. C. M. Hovey and A. McLennan, judges.

Fruit:—From Hovey & Co., one basket and eight boxes of their seedling strawberry, of enormous size, many of the largest berries measuring five to six inches in circumference; also, specimens of the fruit in clusters, as picked from the vine, from plants set out last August, in order to show the productive character of this seedling. The Committee, and several gentlemen tasted the fruit in comparison the Methven, Royal scarlet, &c.

From J. L. L. F. Warren, Methven scarlet, Seedling Methven, Early Virginia, Alpine, and Hauthois (?) strawberries. From O. Johnson, very large and fine early Virginia strawberries. From J. C. Gray, pine-apple or mulberry strawberry. From J. A. Kenrick, Wood strawberries. From Madame Eustis, Royal scarlet and Methven scarlet strawberries.

ART. II. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Pot and Sweet Herbs.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Parsley, per box,.....	12½	—	
Chenangoes, } per barrel,	1	25	—	Sage, per pound,.....	17	20	
} per bushel,		50	—	Marjoram, per bunch,.....	6	12½	
Common, { per barrel, ..	1	00	—	Savory, per bunch,.....	6	12½	
} per bushel, ..		50	—	Spearmint, (green,) pr. b'ach,	8	—	
Eastports, } per barrel, ..	2	25	2 60				
} per bushel, ..		1 00	—	<i>Squashes and Pumpkins.</i>			
Nova Scotias, } per barrel,	1	50	1 75	Squashes, per pound:			
} per bushel,		75	—	Winter crookneck,.....	3	—	
Turnips:				West India,.....	3	—	
Ruta Baga, per bushel,...	75	1 00	—				
French, per bushel,.....	75	1 00	—				
Common (new,) per bunch,	25	—	—				
Onions:				<i>Fruits.</i>			
Red, per bunch,.....	3	4	—	Apples, dessert:			
New white, per bunch,...	4	6	—	Baldwins, per barrel, ...	—	—	
Yellow, per bushel,.....	—	—	—	Russets, per barrel, ...	2 50	3 00	
Beets, per bushel,.....	75	1 00	—	Dried apples, per pound,.	3½	4½	
New, per bunch,.....	6	8	—	Strawberries, per box:			
Carrots, per bushel,.....	75	1 00	—	Wood,.....	20	25	
Parsnips, per bushel,.....	75	1 00	—	Hovey's Seedling,.....	50	—	
Radishes, per bunch,.....	8	4	—	Keen's Seedling,.....	37½	50	
Shallots, per pound,.....	20	—	—	Methven Scarlet,.....	37½	50	
Garlic, per pound,.....	12½	—	—	Common,.....	20	25	
Horseradish, per pound....	—	—	—	Gooseberries (green,) pr q't.	12½	17	
				Currants (green,) per quart,	8	—	
<i>Cabbages, Salads, &c.</i>				Cherries, per quart:			
Cabbages, early, each, ...	6	8	—	Best,.....	12½	—	
Cauliflowers, each,.....	12½	25	—	Common,.....	8	10	
Spinach, per half peck,...	6	—	—	Watermelons, each,.....	25	37½	
Dandelions, per half peck,...	6	—	—	Cucumbers, each:			
Cabbage sprouts, per half p'k,	6	—	—	Extra (forced,).....	20	25	
Lettuce, per head,.....	2	3	—	Common,.....	8	10	
Asparagus, per bunch,.....	6	8	—	Grapes (forced,) per pound:			
Rhubarb, per pound,.....	3	4	—	Black Hamburg,.....	1 00	—	
Turnip tops, per peck,.....	12½	—	—	White Sweetwater,.....	1 00	—	
Cucumbers, (pickled) pr gal.	25	—	—	Blueberries, per quart,....	20	25	
Peppers, (pickled) per gallon	37½	—	—	Pine-apples, each,.....	20	25	
Peas:				Cranberries, per bushel,...	2 00	2 50	
Early, per bushel,.....	1 50	2 00	—	Lemons, per dozen, ...	20	25	
Marrowfat, { per bushel, ..	2 00	—	—	Oranges, per dozen:			
} per peck, ..	50	50	—	Sicily,.....	—	—	
String Beans, per half peck,	75	—	—	Havana, (sweet).....	—	—	
				Cocoanuts, per hundred,...	3 00	4 00	
				Walnuts, per bushel,.....	2 00	2 50	

REMARKS.—In our last report we were congratulating the farmer upon the rapid progress which vegetation had made after the wet and backward spring. But one extreme of weather is generally followed by another: the months of May and June, taken together, were the driest which have been known for seventeen years; only two and a half inches of rain fell in May, and half an inch in June; the consequence was, that in all situations at all subject to drought, vegetation was at a complete stand; the crops of hay will be cut short at

least one third, and in many places one half. Early peas have been, in many soils, literally burnt up. Early potatoes and many other vegetables have suffered severely. Unless rain should fall soon, there will be a great drought.

Vegetables.—Potatoes are abundant; since planting time, the great stock which was brought from the east to supply the demand, has been thrown into the market, which has caused considerable decline in prices. Turnips of the old crop are all gone; new ones are now quite plentiful. Old onions are about gone. New beets have made their appearance; the old stock is reduced, and prices have advanced. Carrots and parsnips are also higher. Radishes are abundant. Old cabbages are all gone, but, to take their place, a few early ones have already made their appearance. Asparagus has been very plentiful and good, owing to the warm weather and consequent rapid growth. Peas have suffered so much from the drought, that there has not been a full supply, and prices have ranged high. The first string beans from the vicinity were brought in this week. Squashes are all gone, except the West Indias: the latter have lately been received in very good order, and of finer quality than usual.

Fruit.—In apples there is now but little doing: russets are the only kind now remaining on hand, and of them the stock is small, and rather inferior; some of the new crop may be expected from the south in a few days. Strawberries have been very abundant; they have, however, suffered from the dry weather: had the season been as wet as usual, the market would have been overstocked: the larger kinds are more cultivated than formerly, and there has been a good supply of fruit. Green gooseberries and currants are abundant. Cucumbers are more plentiful: the short prickly is now brought in from the open air cultivation, (with the aid of hand glasses.) A few blueberries have been received this week. Forced grapes are now just ripening, and very few have yet been sold. Cranberries are higher, and only a few remain on hand. Pine-apples are very abundant, and of good quality; three cargoes, bringing about three thousand each, have arrived the present month. Oranges remain about the same.—*M. T., Boston, June 28, 1841.*

HORTICULTURAL MEMORANDA

FOR JULY.

FRUIT DEPARTMENT.

Grape Vines will now be swelling their fruit rapidly. Attention should be paid to the vines, in order that the wood for bearing next season is laid in so as to ripen well. All superfluous shoots should be cut away, and the clusters of fruit be tied up to the trellis, to pre-

vent their being broken by their large size. Give repeated syringings, as the berries swell, and keep the vines free from insects, particularly the red spider.

Vines in the open air should be attended to; the shoots should be tied in, and all superfluous wood removed.

Strawberry beds may be made this month, on the system described in our Vol. V., p. 167: we have found the plan a very good one. Last year's beds should be kept clear of weeds.

Plum trees may be budded the latter part of the month.

Raspberry bushes should be properly tied up, if not done before.

FLOWER DEPARTMENT.

Dahlias will still require care. If the plants suffer from drought, water freely. Look over, and see that they are not injured by insects. Stake the plants immediately and tie up the branches, as a sudden wind would probably destroy many of the finest plants. Keep the earth well stirred about the roots, and, if convenient, mulching with old cow manure will be of service.

Camellias should not be allowed to get too dry: syringe the plants freely.

Tulips, hyacinths, and other similar bulbs, should be taken up immediately.

Geraniums may still be propagated. Cut down the old plants, if not already done, and put in all the good cuttings.

Ericas of some kinds will yet answer for propagation. Young plants should be placed in a frame, in preference to remaining in the green-house.

Cactuses will need looking after: see that they do not stand in the hot sun all day, or they will be likely to die off at the roots. Place them in the open air, in a half shady situation.

Chrysanthemums should be headed down this month.

Roses of the tender and hardy kinds may be layered now, in pots or in the ground. Budding should be performed this month. Keep the plants clear from insects, by the application of the whale oil soap.

Tree pæonies may be increased by grafting, as recommended in Vol. VI., p. 242.

Calceolarias done flowering, may now be separated, and the young plants placed in frames.

Seedlings, such as Chinese primrose, ericas, &c., should be potted off into small pots.

Carnations and pinks should be propagated, the former by layering the young shoots, and the latter by pipings.

Auriculas and polyanthuses must be placed in cool situations.

Green-house plants will require considerable attention: do not let them lie about the garden, here and there, as if they were not worth any thing. Let them all be set together, or as many together as possible in one lot: see that they are tied up to sticks—well watered—and if any of them need it, that they are repotted. Plants of all kinds need looking to in August, but in a good collection there is no particular time, only when the plants suffer; they should then have immediate care, whether in summer, fall, or winter. Look out and save the seeds of the camellias. Prune in all straggling plants.

THE MAGAZINE

OF

HORTICULTURE.

AUGUST, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *Cursory Notes on some of the Gardens and Fruit Establishments in the vicinity of London; made during a visit in the autumn of 1840.* By WILLIAM KENRICK.

AT the celebrated fruit establishment of Mr. Wilmot, at Isleworth, near London, the hot-houses and vineries are warmed by means of hot water, but by a new and beautiful system, which is called the Penn system, and which, according to Mr. Loudon, bids fair to supersede all other systems and modes. From my observations, on a transient visit to that establishment, a short account of the system is here subjoined.

The house, the subject of that examination, was eighty feet long, sixteen feet broad in the clear, and fourteen feet in the highest part. Within the main body of the house, and in the back part, and extending the whole length, is a narrow air chamber, formed of inch boards. This air chamber extends from the foundation below, to the height of about three feet above the floor, and may be about thirty inches in width. Throughout the whole length of this air chamber the hot water circulates through four cast iron pipes, each four or five inches in diameter, and placed at the distance of three or four inches asunder. These pipes are elevated at different heights, one above another, obliquely, or like stairs or steps; the two uppermost communicating with the tops of the boiler, and also of the cistern, both which are placed at opposite

ends of the house; the other pipes forming the communication between the bottom of the boiler and of the cistern.

Square wooden tubes, of about eighteen inches by twelve, and formed of boards, and connected with the back wall, carry the heated air upwards, from the air chamber, into the highest parts of the house. These tubes are arranged at the distance of about six or eight feet asunder throughout the whole extent; the heated air, thus admitted in the back part, soon fills the house. In the front, and in the lowest part of the house, is a walk from end to end, the bottom of this walk being formed of gratings composed of bars of iron or of wood; and through these gratings the cooler air descends continually, passing to the rear by subterraneous passages, to be heated anew. Thus the circulation can be rendered perpetual.

At that establishment, several distinct buildings are warmed by a single boiler; the hot water pipes being conducted on the surface of the earth, and protected from the cold by a slight covering.

According to Mr. Loudon, Mr. Wilmot even asserts, that, compared with this new system of heating and of circulation, all other systems are a *farce*.* The pine-apples, also, which are raised by this mode, are stated to be far superior in flavor to all others artificially raised by other modes. Perkins's system of heating by small hot water pipes, is another new and extraordinary system, and the most sanguine hopes and expectations are entertained of its results.

I am aware that Dr. Lindley and some others have objected to the particular system adopted by Mr. Wilmot, but I know not with what sufficient cause. It might perhaps be an improvement to invert the arrangement, and allow the heated air to arise through the gratings of the walk in front, instead of descending at that place, and having arisen and passed upwards, to allow it to descend on the back side, and having passed by the subterraneous passage to the front, and becoming heated anew, allow it thence again to rise.

The varieties of grapes which are cultivated at Mr. Wilmot's almost exclusively, and, from long experience, most approved by him, for great productiveness and profit, are the following four kinds chiefly:—*Wilmot's early Muscat*; *New*

[* Some remarks on this system, or Penn system, so called, will be found in our Vol. VI., p. 144.—*Ed.*]

Sweetwater, which is probably the same which is elsewhere called *Grove End Sweetwater*; *Canon Hall Muscat*; and *Wilmot's black Hamburg* or *New Dutch black Hamburg*, as it is variously called. This last is a very productive, beautiful, and curious variety, the bunches and berries being equally as large as the *old black Hamburg*, but the berries have the appearance of having been rounded by repeated strokes of a hammer.

Another house at the establishment of Mr. Wilmot, is heated by a hot air stove of the most approved construction, and, as I was assured, by an incredibly small quantity of fuel, or expense. The stove is composed of two parts; an inner stove, in which the fuel is placed, and an outer, which consists of an upright cylinder of sheet iron, with an interval or space, through which the colder and denser air rises as it becomes heated, and thence is dispersed in the house. This outer stove has a circular lid or covering. The air which feeds the fuel is admitted direct by a tube from the outside of the building. The smoke or vapor from the burning fuel passes horizontally the length of the building, by a small sheet iron funnel, three or four inches in diameter. Oblong troughs, with semicircular bottoms, rest on the funnel at intervals; these, being filled with water, communicated a genial moisture to the atmosphere.

Of the kinds of pears which are most extensively cultivated by Mr. Wilmot, for great profit and productiveness, I will only name the *Capiaumont*, the *Williams's Bon Chrétien* or *Bartlett*, the *Marie Louise*; the *Jean de Witt* is another new and most productive winter pear, which is much cultivated by him. Mr. Wilmot, for profit, places his pear trees in close order, or about sixteen feet asunder, and allows them to branch low. These bore enormous crops in 1840. At the venerable Mr. Kirke's nursery and fruit establishment, at Brompton, his trees, both of the pear and apple, are also for profit planted in remarkably close order, or ten or twelve feet asunder, and allowed to branch quite down to the ground. These in like manner bore enormous crops in that year. The garden of Mr. Kirke was formerly part of the garden belonging to Oliver Cromwell, who resided at Brompton while Lord Protector, and in the venerable mansion contiguous to this garden. The old oaken door, beneath the brick archway which separates the gardens, both formerly belonging to

him, was shown me as a curiosity by Mr. Kirke; this, though exposed to the weather, and not painted, together with the iron, is still in a fine state of preservation, although it has stood nearly two hundred years.

At the garden of the London Horticultural Society, the trees are set very remarkably close, and generally trained as quenouilles, or in pyramidal forms. These also bore remarkable crops in that year, being furnished with limbs quite to the base, some of the branches loaded with fruit, at times resting on the ground.

WILLIAM KENRICK.

Newton, July, 1841.

ART. II. *Pomological Notices; or Notices respecting new and superior varieties of Fruits, worthy of general cultivation.*

OWING to the number of excellent communications with which we have been favored by our correspondents, we have been unable to complete our pomological notices for the season. After the appearance of Mr. Manning's article, describing one hundred and twenty-four varieties of apples, it was our intention to insert in the next number some brief notes on a few new fruits which have been brought into notice within a short time, in England; but although the year has so far advanced, still we believe they will be read with as much interest now as if they had appeared in April or May. An acquaintance with them at this time will enable the amateur to procure them from abroad, if he is desirous of doing so; or, in case they may have already been obtained by some of our more enterprising nurserymen, secure them at once, in order that their merits may be more speedily tested. The facility with which plants may now be obtained, by the aid of steam communication with England, opens a new field of enterprise to the nurseryman, by giving him the opportunity of importing, with some degree of safety, what before it was almost impossible

to receive alive. The rapidity with which information is now transmitted, will also tend to bring to our notice accounts of new fruits and plants much more speedily than heretofore.

PEARS.—*Van Mons Leon le Clerc pear*.—This fine new variety, already described and particularly noticed in our last volume, (VI., p. 47,) is again mentioned in order to make some remarks relative to the character and identity of the fruit.

It has been doubted by many of the English nurserymen, that the pear was a new and improved variety: the plants were only to be procured of M. René Langlier, of the Island of Jersey, and many believed it to be the old Leon le Clerc, already in the catalogues. Notwithstanding the remarks which appeared in the *Gardener's Gazette*, together with extracts of letters from M. le Clerc, some of the more sceptical continued to doubt its genuineness. On this account, M. le Clerc addressed a letter to the conductor of the *Gardener's Magazine*, in which he fully explains and justifies the reason for naming this pear Van Mons Leon le Clerc.

M. le Clerc states, that having raised a new pear, he presented some specimens of the finest to Dr. Van Mons, in order that he might give his opinion of its merit. These he pronounced of the "very first rank," and from their excellence, was willing to accept of the dedication of the pear to him. But M. le Clerc, being under the necessity of distinguishing the new fruit from several others which bore the name of Van Mons, it was the desire of the venerable pomologist that the name of M. le Clerc should be placed after his, to serve as a distinctive character; it was in consequence of this that the pear was thus named.

With this letter, M. le Clerc transmitted Mr. Loudon some specimens of the fruit, from the original tree. The conductor remarks that they were the best pears he ever tasted; they were perfectly ripe on the 15th of October, as large as the largest Duchess d'Angouleme, and shaped a good deal like that fruit, with a flavor remarkably rich, partaking of the pineapple, and of a sugary richness. Mr. Thompson, of the London Horticultural Society's Garden, will prepare a more perfect description of it. In the mean time, the conductor states, that no possessor of a garden will lose any time in securing what really appears to be, "the best pear in existence."

This variety was sent home by Mr. Kenrick, last winter,

and some few trees have been distributed through this source. We possess a tree, which is now doing well. Mr. Wilder also possesses it, having imported it with some other sorts: an opportunity will thus be early afforded of testing its extraordinary qualities, and we shall await with some interest the period of the production of the fruit.

Jean de Witt is the name of a new pear, which fruited for the first time last fall. It is very like the Glout Morceau, bears well, and keeps till February. The specimens were from the Society's garden.

Ne Plus Meuris, another new one, was also presented among other specimens from the Society's garden, and is said to have been one of the best pears exhibited at the meeting.

Monsieur le Cure, a baking pear, has been proved to be the same as the Vicar of Wakefield.

Hacon's Incomparable.—Mr. Rivers, in an article in the *Gardener's Chronicle*, states that this fine variety produces better fruit on a standard than when growing on the wall. The history of the parent tree is unknown. Mr. Rivers states that it is in a healthy state, now sixty years old, growing at Downham, in Norfolk, and he is inclined to think it of accidental origin, as he has never received it from France or Germany. It is considered by some as the best winter yet produced.

Groom's Princess Royal.—Mr. Groom, the great tulip fancier, has produced a seedling pear, which he has called the Princess Royal, and it is stated to be a valuable addition to the collection of winter fruit. It forms a middle sized, round or Bergamot-shaped fruit, with a small but open shallow placed eye, and short thick stalk, scarcely sunk at its insertion. The skin is of a greenish brown color, with a tinge of yellow, and slight traces of grey russet. The flesh is melting, but rather gritty near the core; notwithstanding which, its good flavor, and property of keeping probably till March, render it worthy of cultivation.

RASPBERRIES.—Since the Franconia raspberry was introduced, no other variety of merit has been added to this excellent fruit. That variety is yet but partially known in this country, particularly out of the vicinity of Boston. It is but a few years since it was imported from France, and it is only now found in the gardens of amateurs and cultivators who are

select in their collections of fruit. For all the good qualities which can recommend a variety, it ranks high, and any other variety, to surpass it, must be of extraordinary merit. We find advertised in the London Journals a new kind, viz.,

New Victoria Raspberry.—It is stated to be a new and superior seedling, possessing all the qualities of the Antwerp, and an additional and desirable property of bearing an abundant crop from July to December, producing spikes of fruit, with numerous side branches from eighteen inches to two feet long. It may be grown to great advantage in pots, and, with a little protection, kept in a good bearing state to the end of the year.

This variety is recommended to amateurs, and others who possess gardens, and who are desirous of prolonging the season of the raspberry as late as December. It would be a great treat to place upon the table a small dish in the month of September. It requires different treatment from the common kind, to fruit well. This, however, is explained to all who purchase.

We look upon the production of this variety as another source opened for continued improvement. If it continues to maintain its productive habits, it may become the parent, by cross impregnation, of new and better varieties of the raspberry. We might here suggest to the enterprising amateur the field that is open to him in the growth of new kinds. There is no doubt but that the size may be much increased, and a better flavor secured, by experiments of this kind, with the same success that has attended the cultivation of the strawberry. We hope to see the Victoria raspberry speedily introduced.

GRAPES.—It is now some years since any remarkable variety of the grape has been introduced. The black Hamburgh has so long retained the ascendancy over other sorts, that it seems to be depended upon alone, and but little effort has been made to introduce others. Although there have been many excellent additions to the plum, the cherry, the pear, the apple, &c. by the means of new seedlings, there seems to have been very few seedling grapes. Mr. Knight, as was his constant practice with all fruit, raised a few seedling vines, one or two of which are considered at this time good kinds, but no particular pains have been taken to produce new varieties. Even many of the very excellent varieties of table

fruit which abound in the French gardens, have not been introduced. The whole number of grapes cultivated in our graperies and gardens does not much exceed half a dozen. We have now, however, the gratification of naming a new fruit, which is said to be a splendid variety.

The Royal Victoria Vine.—This variety was raised at Burcot Park. The berries measure from three to four inches in circumference, and are of an exquisite flavor. The bunches weigh from three to four pounds. It is a prolific bearer, and well suited for graperies or green-houses.

What the real merits of this variety are, we shall soon ascertain, as Col. Perkins brought out a plant the past spring, when he returned from London. It came in good order, and is now grown so vigorous, under the good management of Mr. Cowan, that it may show a few clusters next year. When it has fruited, we shall endeavor to speak of it further.

CHERRIES.—*The May Bigarreau.*—Under this name, Mr. Wilder, the President of the Massachusetts Horticultural Society, exhibited the fruit of a cherry, the tree from which they were picked having been received from France under the name of the May Bigarreau. Mr. Wilder sent for the very earliest cherry that was known in the French market. It is a dark colored cherry, of medium size, and of very good quality for an early variety. It is ripe about a week earlier than the May-duke.

STRAWBERRIES.—Since the production of Keen's Seedling, upwards of twenty years since, there has not been any new variety raised in England, of sufficient merit to displace that kind. It still stands pre-eminent among all the numerous sorts, upwards of fifty in number, which have from time to time been ushered into notice, and many of which, at this period, have been thrown aside as worthless varieties. A few years since, a new one was offered for sale, called Myatt's *Pine-apple*. It has not, however, been very generally cultivated. The flavor of it is said to be very superior, but it is so difficult of cultivation, requiring very peculiar soil and treatment, that it is in a great degree rendered worthless. Mr. Wilder has a small bed of this kind, but it did not fruit sufficiently this season to form any opinion of its merits.

The Swainstone Seedling.—We noticed the introduction into this country of this new kind some time ago, (p. 35;) but we have since learned, that none of the plants sur-

vived the voyage. We hope, however, attempts will be again made to introduce it, and with better success. That its merits may be more fully known, we add the following account of it from the *Gardener's Magazine*:—

The Swainstone Seedling was raised at Swainstone, in the Isle of Wight, in 1838, and promises to be a very valuable variety. The foliage is large, somewhat resembling that of Keen's Seedling, and the fruit is also large, and produced in extraordinary numbers during the whole summer. In shape, the fruit resembles that of the Alpine, but is three or four times larger. The scapes are much branched, and contain many fruit, and even blossoms, in all the different states, from the opening blossom to the mature fruit, at the same time. Specimens were brought from the Isle of Wight, last October, with many ripe fruit, and others in different stages, and also blossoms, as above mentioned. The flavor is said to be good, and the culture that of the common kind.

From this description, we should judge it might be a mixture of some of the large strawberries and the Alpine, as it has the habit and large size of the former, and at the same time the prolific quality of the latter. Producing fine large fruit in September and October, will be its greatest value.

This article will conclude our pomological notices, probably until the commencement of our next volume.

ART. III. *Phlox Drummondii*, as a Green-house Plant.
By the EDITOR.

WE have so often alluded to this beautiful plant, that we fear our readers will think that we are giving it more importance than it can truly claim, as an object of ornament for the garden. To this opinion, however, we cannot give our consent. It may be said that we are prejudiced in its favor. If admiration of its exquisite flowers may be called prejudice,

we are decidedly so; for we never look upon it, or cut one of its clusters of flowers, but we are involuntarily led into exclamations of its great elegance. As a summer ornament of the border, and as a winter inmate of the green-house, it is equally to be admired.

Now that the season is at hand, when it is to be seen in its full splendor in the open garden, and when its seeds should be planted to produce plants for blooming in the green-house in the spring months, we are induced to make a few observations upon its cultivation in the latter place, having already spoken of its treatment (Vol. IV., p. 322,) in the flower garden.

The seeds, to produce good plants, should be sown the latter part of August, or, at the latest, by the middle of September. Collect them from the plants now growing, if such can be had, or procure them from the seedsmen. Select a shady situation in the garden, where the sun only shines in the morning or afternoon, and plant the seeds, after having well pulverized and prepared the soil. In the course of a week or two, they will be up.

Keep the young plants free from weeds, and in the latter part of September if the seeds were sown in August, or in October if they were sown in September, take up the young plants into pots, placing one in each, in a No. 1. Any common soil of the garden will answer for potting them.

The pots should then be removed to a frame, where they may remain until November or December, giving occasional waterings, though they will need but a very small quantity at this season of the year. At the end of this time the plants may be removed to the green-house, placing them on an airy shelf, as near the glass as is convenient, watering them very sparingly.

About the 1st of February, the strongest of the plants may be removed into No. 2 pots, using about half loam and leaf mould, or peat and a small quantity of sand, giving at the same time, a good drainage to the pots. The weaker plants need not be repotted until March.

When the flower stems appear, they should be tied to neat sticks, painted green, to give them a handsome form. If allowed to trail over the sides of the pot, they do not look well, from the half erect habit of the plants. We have trained them to small delicately made trellises, of a fan shape, and

found the plants to present a very showy appearance; this, however, is unnecessary, unless the amateur has leisure time, and wishes to indulge in such fancy work: to look well, it must be done neatly, and the plants often looked over, and the stems tied up with fine bass or grass matting.

In this manner the plants are rendered the gayest objects of the green-house or parlor, blooming abundantly from March to June. The plants might be then turned out into the border, where they will continue to flower all summer.

ART. IV. *Floricultural and Botanical Notices of new Plants figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

The Gardener's Chronicle, a stamped newspaper of Rural Economy and General News. Edited by Prof. Lindley. Weekly. Price 6d. each.

Floricultural and Botanical Intelligence.—*Thunbergia alata* var. *aurantiaca*.—We have now in flower a few plants of this new and most beautiful variety of the thunbergia. The plants were raised from seeds sown in May, and though yet small, have commenced flowering. The flowers are of the same size and shape as the *alata*, but in the place of the delicate buff color of that species, they are of a bright, rich, shining orange, the surface of the petals having a glittering

appearance in the bright sun. It is a most valuable acquisition, and with the white and the buff, forms a trio of beauties which should be in the possession of every lover of flowers. When the new azure blue one, *T. Hayneana*, is introduced, which we hope to procure next season, a great contrast may be created by planting out the several kinds together, and training them up to neat trellises.

Lilium lancifolium album, one of the new Japan lilies introduced by Dr. Siebold, will soon flower in the collection of M. P. Wilder, Esq. It has already thrown up a large spike of flower buds, which will probably be in flower by the time this paragraph appears in print.

New Verbenas.—We have now in our garden several seedling verbenas coming into flower. Among them is one pale pink or flesh-colored one, highly fragrant, with a good habit, promising now, although it has opened but one umbel of flowers, to be the most exquisite variety that we have ever seen. We shall notice it again when it has more fully developed its character, as well as any other decidedly new one which may flower among the number.

Spiræa lobata var. americana.—One of the most showy perennials which has been introduced into our gardens is this new variety of spiræa. It has already been mentioned in our pages, (Vol. VI., p. 410,) as having flowered in the choice collection of Prof. Jackson, of Union College, Schenectady, who was the first to bring it to notice. Mr. Wilder received it from Prof. Jackson, last season, and it flowered beautifully. The plant having acquired more strength, it has flowered superbly this season, throwing up stems six feet high, with splendid large clusters of feathery rose-colored flowers. No collection of herbaceous plants can be complete without it.

New species of Sálvia.—A beautiful new species of this beautiful genus, from Mexico, the *S. tubifera*, with graceful drooping racemes of rich purple slender flowers, has lately been in flower in the garden of the London Horticultural Society. Although it is not the most brilliant, it is the most elegant of the genus yet introduced.

Epiphyllum truncatum violaceum.—This is a new and superior variety of *E. truncatum*. In growth and habit it resembles that species; its flowers are nearly of the same size and shape, but have that inimitable glow of purple and rose

which characterizes the inner petals of *Cereus speciosissimus*. It requires the same management as the *truncatum*: it may be grafted on the *Pereskia*, or on the *C. triangularis*, in the usual manner. It was originally sent to Mr. R. Harrison, of Liverpool, by Mr. Moke, of Tejuco, a place about twelve miles from Rio, and it has flowered in the gardens of George Knott, Esq., of East Bennett, under the care of Mr. Judd.

Blue Lechenaultia.—A new species of the *Lechenaultia*, with blue flowers, is said to have been introduced from Swan River. Some of the London nurserymen have offered it for sale. If as free flowering as the *L. formosa*, it will be a great addition to the green-house.

Clánthus carneus, is the name of a new green-house climber, introduced some few years ago, from Norfolk Island, as the *Streblorhiza speciosa*. It has lately flowered in great perfection at the nursery of Messrs. Lucombe Pierce & Co., of Exeter, who say, in a letter in the *Botanical Register*, that "in a cold conservatory, it is covered with bunches of flowers, and has succession enough to continue so a month or two longer. I am of opinion it will prove a very good conservatory climber. It trains freely, of its own accord, up one of the pillars of the camellia house, and has fine ever-green foliage."

Victoria regia.—Seeds of this, the queen of hot-house aquatics, have been received in a fresh state, by Mr. Schomburgk, the discoverer of the plant, who has distributed them among his friends. The seeds were procured after three trials, the plants not having been in a seeding state the two first visits. It is hoped that an opportunity will soon be afforded of seeing it in bloom.

Seedling Epacris.—Mr. Low, of the Clapton nursery, exhibited five new seedling epacrises, at a late meeting of the London Horticultural Society. No mention is made of the colors, or the merits of the different kinds.—*Ed.*

New green-house Annuals.—The following plants are late and beautiful additions to the garden:—*Portulaca Thellussonii* has most brilliant red flowers from May to October. Several noble species of balsams, such as *Impatiens rosea*, *grandiflora*, *macrochila*, and *tricornis*, have lately been introduced from the north of India, quite different in character from any previously grown in this country: the colors of their flowers are purple, rose, pink, and white. One of the most beauti-

ful of the recent introductions is said to be the *Lobelia ramòsa*, a native of Swan River, and producing a profusion of bright blue flowers, from April to July. *Isótoma Brównii*, a plant like a *Lobelia*, from Swan River, is very handsome, with purple, white, and rose colored flowers. It is at present, however, extremely rare.

Caméllia japónica var. *Bevaniàna* is the name of a new fine rose colored variety exhibited at a meeting of the London Horticultural Society, in March, and to which a premium was awarded for its excellence.

Seedling herbaceous Pæonies.—Five or six kinds of new herbaceous pæonies have been raised in Paris, by M. Guerin Modeste. Specimens of all the flowers were sent to Mr. Loudon, but the petals had fallen off when they arrived, and no description could be given.

Cereus Wortleyanus.—A beautiful variety of the *Cereus Jenkinsonii* has lately flowered in the garden of Lord Wharncliffe, Wortley Hall. The flowers are not more than two thirds the length of the latter, the petals oblong, and rounded at the point instead of narrow and tapering, and in room of the deep crimson of *C. Jenkinsonii*, they are of a clear orange buff. It is said to be a decided acquisition.

Brachycôme iberidifolia is stated to be one of the finest annuals in cultivation, and the greatest acquisition to the flower garden since the introduction of *Verbena chamædrifolia*. A bed of brachycome presents a beautiful appearance, every individual varying in color. The plants acquire, often, the height of two feet, and two and a half feet in diameter, and more than two thousand flowers are expanded at once. It is also well adapted for pots for early flowering, and lives for nearly six months, whether growing in the open border or in pots. A light rich soil suits it best. Seeds are not produced freely, but young cuttings, placed under a hand-glass, root in a few weeks. It has not yet been introduced to our gardens, but we anticipate the reception of a few seeds in the course of the fall.

New Caméllias.—Some new additions have been lately made in England to this splendid genus, from seedling productions, and also by new importations; of the latter, *Caméllia japónica* var. *Alberti*, named in honor of Prince Albert, is figured in Paxton's *Magazine of Botany*, and described as a handsome striped carnation looking camellia, imported by

Messrs. Chandler from China. *C. var. serratifolia* is also another Chinese one, having red flowers, with a white stripe through the centre of each petal.

The Marchioness of Exeter Camellia.—A new seedling under this name was exhibited at a meeting of the London Horticultural Society in April. It was one of the greatest objects of interest. It is described as of "beautiful form, deep rose color, and large size, (five and a half inches in diameter.)" The writer remarks, that it is doubtful whether any better kind of the color exists. It was raised from the old Middlemist.

Six seedlings were exhibited at the same meeting by Mr. Ivery of Peckham.

At the exhibition of the Frankfort Horticultural Exhibition at the Easter Fair, many splendid camellias were exhibited. Among them were some "both pink and white, more perfectly resembling roses, in bud, flower, petals and expansion, than any the writer ever saw, particularly a splendid white, which one might have taken for an opening Rose Unique; and one pink, or light crimson, with exactly the loose, large, concave petals in the whole flower that one sees in the Isle de Bourbon rose. There were also some fine cup-shaped varieties, full of small petals, paler and paler, approaching the centre; for one of these, Baron Pronay got the best gold medal.

Azalea indica var. Herbérta.—This is said to be the most splendid variety that has yet been raised. The blossoms are brilliant rosy purple, with a number of deeper colored spots in the throat, have prominent stigmata, and are about four inches across. They are produced in large heads, and stand out boldly above the foliage. It is supposed to be a cross between *A. Danielsida* and *A. phœnicea*, and was raised by Mr. Herbert, of Spofforth, after whom it was named.

Two fine varieties of the azalea have also been raised by Mr. Rintz, at Frankfort; one is a "new white, with large splendid flowers, of great beauty; and the other a splendid deep purple."

A fine plant of a new azalea, called *A. Gledstanèsii*, was exhibited at the great Show of the London Horticultural Society, on May 15th, by Messrs. Rollisson, of Tooting. It is nearly allied to *A. indica variegata*: the flowers are almost white, sparingly and only occasionally striped with reddish pink.

REVIEWS.

ART. I. *Organic Chemistry, in its application to Agriculture and Physiology.* By JUSTUS LIEBIG, M. D. &c., Professor of Chemistry in the University of Geissen. Edited from the Manuscript of the Author, by Lyon Playfair, Ph. D. First American edition, with an Introduction, Notes and Appendix. By John W. Webster, M. D., Professor of Chemistry in Harvard University. 1 vol. 12 mo. 435 pages. Cambridge, Mass., 1841.

THIS important work to the agricultural community, and indeed to all cultivators of plants, has now been published some weeks, and it was our intention to have presented a digest of it in our pages ere this. We placed the book in the hands of a friend, who, we doubt not, will do full justice to it, and we hope he may be able to lay the article before our readers, in our next number. To give a proper idea of the value of the work, is no light task; it requires considerable study, and withal, some knowledge, by the reviewer, of the structure and physiology of plants. The work has met with a very favorable reception from the public, and we believe another edition will be issued, in the course of the year.

The introduction and notes to the American edition, by Dr. Webster, render the work more instructive to the common reader. Many of the technical phrases are explained, and some parts of the original work, which would be of but little value, only to the physiologist, have been omitted.

The Appendix is also extended to nearly fifty pages, and contains the views of Dr. Jackson and Dr. Dana, respecting geine and humus. Dr. Liebig has taken but a limited view of the action of these properties, and the opinions of the former gentlemen, although the opposite of those of Dr. Liebig, are entitled to the greatest consideration.

Were it not that we might anticipate some of the remarks of our reviewer, we should make some extracts from the introduction of the American editor. But, for the present, we leave the subject here, advising a perusal of the volume, by all who are interested in gardening or agriculture.

ART. II. *Agriculture of the United States. An Address delivered 14th of April, 1841, before the American Institute in New York.* By HENRY COLMAN, Commissioner of the Agricultural Survey of Massachusetts. Pamphlet, 30 pages. New York, 1841.

THIS is the fifth address of Mr. Colman, which we have noticed within a short period. Like others of his production, they are full of valuable information upon the great art of agriculture, both in a general and practical view. Mr. Colman's long and familiar acquaintance with agriculture, formerly a practical man, to some extent, and latterly a writer for farming papers, as well as the Commissioner for the Agricultural Survey, has given him the opportunity of making more accurate observations, and storing up more statistical information, than any other individual in the country.

It would be impossible for us to give any thing like an abstract of this address, the topics which it discusses are so various. It will have the tendency to spread a taste for farming among the citizens of our sister State, and its extensive circulation by the American Institute, will give it a very general perusal.

ART. III. *Bee-breeding in the West.* By THOMAS AF-FLECK. 1 vol. 12 mo., 70 pages. Cincinnati, 1841.

THIS is the title of a small volume which we have received from the author, and, what is unusual for us in a work not exclusively horticultural, we have read it through, and are highly pleased with it. It is a plain and practical treatise, written, as the author states in his preface, expressly as a "Western work," but it may be read with profit by every bee-keeper, whether in the east or west.

In the prefatory remarks, the author alludes to the *patent* hive of Mr. Weeks, (who has also published a treatise on the

subject,) and very properly ridicules the idea of a *patent* applied to a bee-hive. Nothing, it has seemed to us, could be more ridiculous than patents for such articles as *Weeks's hive*, *Dennis's troughs*, &c. They cannot afford any great profit to the inventors, while, at the same time they impede the progress of agricultural improvement, by throwing in the way of the farmer pecuniary obstacles. If these inventions had cost the authors years of labor, and an outlay of money, to bring them to perfection, such patents would be allowable. But it is not so. Many of these patents are the improvements of public spirited individuals, who feel that it is sufficient compensation to have their labors duly appreciated, but which are caught up by those who have not the genius to invent any thing new, and after being burdened with a patent, the further use is at once checked and lost.

In conclusion, we would recommend Mr. Affleck's book to every bee-breeder, whether he be Yankee, Hoosier, or Buckeye.

MISCELLANEOUS INTELLIGENCE.

ART. I. General Notices.

Preservation of Marie Louise pears.—At a meeting of the London Horticultural Society, on the 1st of December, Mr. Crace, of St. John's Wood, exhibited some fine specimens of the Marie Louise pear, although the season of them was some time past. He handed in a memorandum, which was read at the meeting, detailing his peculiar management. His trees were described as being trained in the balloon fashion. About the first of October, he matted up the south and west sides of the trees, leaving them open to the north-east. They were then in full foliage, and continued so nearly three weeks later than the other trees of the same kind, not matted. On the 25th of November, in consequence of the bad weather and heavy gales, it became necessary to gather the fruit, which, however, if it had not been for this circumstance, would have remained on the trees much longer. Mr. Crace was very confident he should be able to gather fruit from the trees as late as Christmas.—(*Gard. Chron.*)

Musa Cavendishii.—This fine species of the banana is now extensively cultivated in England, for its fruit. It is a dwarf species, a t-

taining only to the height of four or six feet, and produces clusters of upwards of one hundred and fifty fruit. It may be made to produce its fruit with all the certainty of the pine-apple. It is propagated by suckers, when about a foot long. These should be taken off, and put into pots, in a soil composed of two parts turfy loam, with one part vegetable soil and well rotted manure from hot-beds, and a small portion of sand: the pots should be plunged in a good heat: when rooted, repot them into larger pots, as they require it, until they are placed in a box, about three feet square; in this they will fruit. Keep them in a temperature of 55° to 60° in the winter months, and 75° to 90° in the summer. In eighteen months after the suckers are planted, with good management, they will produce a fine cluster of fruit. A house eight feet high is sufficiently lofty to grow this species.—*Id.*

Brick rubbish a good Manure for Strawberries.—A writer in the *Gardener's Chronicle* states, that from the circumstance of his having seen a luxuriant growth of grass on a piece of land where brick kilns had stood eight or ten years before, he was induced to try the experiment in his own garden. Accordingly, he selected an old bed of Keen's Seedling strawberry, which had been planted out about six years, and the land was nearly worn out. The ground was dug up between the rows, and the spaces filled four or five inches thick with brick rubbish, (without a particle of manure,) during the winter. The luxuriance and fertility of the plants was remarkable. The soil was a strong loam upon a wet clay subsoil.—*Id.*

Easy method of propagating the Pink.—In a late number of the *Gardener's Chronicle*, we find the following plan of cultivating the pink, by Mr. Mearns. We recommend it to the notice of our readers who are partial to this fragrant and beautiful flower.

The method which I have adopted in the propagation of the pink, bids fair to render it much more abundantly cultivated than it has hitherto been. The usual method required too much time and attention, and consequently made it an expensive process to get a fair stock for the ensuing season; and after all the time and labor in trimming, covering with hand-glasses, and the attention paid to shade them from the powerful mid-day sun, it too frequently happened, that, from a quarter of an hour's neglect, whilst the meridian sun darts his powerful rays upon the glasses, without the intervention of shade, the whole have been destroyed. When I came to lay out the Zoological Gardens at this place, all my men were merely excavators, and therefore not to be trusted to shade hand-glasses, if I had possessed any, and I had no time to bestow on such work myself. Yet I was very anxious, amongst my other propagations, to get an abundance of my favorite flower, the pink, as easily as I possibly could; I therefore procured as many cuttings as I desired, among the gentlemen and gardeners around, and took the chance of propagating them *in the open ground*, as the only means at that time in my power. I had many years been aware that shortening, or any way cropping, the grass of the pink, previously to putting it in to strike, was a bad plan; it likewise suggested itself to me, that (something after my principle of coiling the vine) if I doubled up the lower end of each slip, it would undoubtedly facilitate the

emission of roots; and to enable me to accomplish it with greater facility, I made the soil *much* firmer than is usually done in the general manner of piping. I do not use a dibber to plant with, but my fore-finger; I lay the lower end of my slip *horizontally* upon the surface of the soil, and so press it down into it; when, from the firmness of the soil, the slip is compelled to clip round the end of the finger; with the other hand I turn up the top to its perpendicular, and press the lower end down till the tail is about half an inch beneath the soil; I then make the soil firm, and the operation is complete. If the slips are too long, I cut them up to a joint, to a suitable length. I have slipped off hundreds, and have not even cut off the rag left on in slipping; and by the above process, not one cutting has failed; yet it is better that the ragged end be cut off, either with a sharp knife, or with scissors, which is generally the most expeditious method. I planted one thousand seven hundred slips this last season, not twenty of which missed, and all my plants are firm and stocky. The first season that I commenced operations here, I used to shade them, when the sun was powerful, for the first fortnight, with *fresh* cabbage or rhubarb leaves, laid over some pegs, stuck diagonally amongst them, or a few hoops bowed over them, placing the *under* side of such leaves *at all times undermost*; by which means a humid atmosphere is preserved, whilst the powerful sun is upon them. The last two years I have used no shading, as I have had no time to attend to it, and few plants have missed. The pipings are best left with no other attention, after planting, besides occasional watering, in dry weather, and keeping them free from weeds till the time for planting out, which may be done at any time after the plants are perfectly rooted: the usual season, however, to plant out for flowering in the highest perfection, is September; and for propagation, all the month of June, even to the middle of July.

Best Dahlias.—We find a list in the *Gardener's Chronicle*, of all the best dahlias now offered for sale. As it may be interesting, we have condensed the following from the list of upwards of eighty kinds. The abbreviations to the names are as follows:—*g.*, good: *v. g.*, very good: *g. un.*, good, but uncertain: *v. g. un.*, very good, but uncertain: *v. g. s.*, very good, but small.

Springfield Rival. *v. g. s.*
 Le Grand Baudine. *v. g.*
 Unique. *v. g. s.*
 Grace Darling. *v. g.*
 Beauty of the Plain. *v. g.*
 Argo. *v. g.*
 Maria (Wheeler's.) *v. g.*
 Nicholas Nickleby. *g. un.*
 Hope. *v. g.*
 Ne Plus Ultra. *v. g.*
 Yellow Defiance. *v. g.*
 Pickwick. *v. g.*
 Climax. *v. g.*
 Duchess of Richmond. *v. g.*
 Bloomsbury (Pamplin's.) *v. g.*
 Phenomenon. *v. g.*
 Danecroft Rival. *g.*

Lee's Bloomsbury. *g.*
 Charles XII. (Pamplin's.) *g. un.*
 Rouge et Noir. *v. g. un.*
 Rival Sussex. *g.*
 Eva. *v. g.*
 Advancer. *g.*
 Annot Lisle. *g.*
 Lewisham Rival. *v. g.*
 Suffolk Hero. *v. g.*
 Bontisholl. *v. g.*
 Rienzi. *v. g.*
 Maresfield Rival. *g.*
 Metella. *v. g.*
 Penelope. *v. g. un.*
 Windmill Hill Rival. *v. g. un.*
 Windsor Rival. *v. g. un.*
 Rosa (Bree's.) *v. g. un.*

Hybridizing Plants.—In hybridizing plants, care should be taken to save seed from those flowers which have the best shape, for I believe the form of the future flower is much more dependent on the kind from which the seed is saved, than upon that which furnishes the pollen: the pollen generally gives the color. It is also highly desirable that the flower from which the pollen is taken should be darker than that producing the seed: for I have found, in such cases, the seedlings have been much more beautiful, (being frequently spotted or striped,) than when I have reversed the process. I have seen this occur in so marked a manner in ranunculuses, that I have adopted it as a principle, never to take pollen from a lighter colored flower. I remember, many years ago, crossing a black ranunculus with one quite white; the produce from which, instead of being what I wished it, came an indifferent gray, the white having merged into the black, without producing any definite character.—*H. Groom, in Gard. Chron.*

Pruning the roots of pears.—No. 9 of the *Proceedings of the London Horticultural Society* has been published, and contains many excellent papers read before the Society at its several meetings. One, by Mr. Rivers, of Sawbridgeworth, on the advantages of pruning the roots of pears, is well worthy of perusal; the substance of it is as follows:—It appears that in consequence of the confusion in the names of pears, the author was induced to plant specimen trees of all the varieties he then possessed; but fearing that much ground would be wasted in the experiment, he endeavored to discover some means of arresting their superabundant growth, and inducing early fruitfulness. Having previously remarked that apple trees, growing in a firm loamy soil in his nursery, if removed one or two years consecutively, acquired a stunted and prolific habit, it occurred to him, that if he could keep the roots of his pear trees in the same state by frequent removals, he should make them also acquire the habit he had so long observed in apples. But, in attempting to remove his pear trees, the author considered that it would be less trouble to dig a trench round them, and cut all their roots at a certain distance from the stem; and in this respect, his anticipations were completely fulfilled.

The best description of trees, for the purpose of forming what Mr. Rivers calls garden orchards, are half standards, with round, well formed heads, or plants trained *en quenouille*, or dwarfs in the usual bush fashion. For immediate effect, these should be prepared by annual root pruning for one, two, or three years, in the nursery, and afterwards they are to have their roots annually reduced, by digging a trench round the trees, and removing all large roots by means of a sharp spade. In the course of years, a perfect ball of fibrous roots will be formed, which will only require the occasional operation of a trench being dug and the balls pared down, to ascertain whether large feeders are making their escape from it. But as this circular mass of soil will in a few years be exhausted, there is left round each tree a slight depression in the soil, or, in other words, the trench is not quite filled in, and this circular furrow is filled with liquid manure; or common dung may be laid round each tree in the autumn, and suffered to be washed by the rains of winter, or drawn

in by worms. The author stated that he had also practised root pruning on apple trees, for two years, and has reason to hope for perfect success; as also with plums and cherries.—(*Gard. Chron.*)

Striking plants from buds and leaves.—In the spring of 1838, previously to his leaving Downton, unfortunately never to return, it occurred to Mr. Knight's inventive mind, that plants might be propagated from single buds and leaves only. Accordingly, he had several pots filled with fine sandy loam, *the pots were about twelve inches in diameter*, to receive the cuttings, which he prepared himself. The buds and leaves were cut out as is usually done when intended for insertion in stocks, with but a very small portion of the alburnum to each. The kinds he operated upon were double camellias, magnolias, metrosideros, acacias, nereums, rhododendrons, and many others. The soil in the pots having been previously pressed firmly down, and the surface made perfectly smooth, the cuttings were inserted with a dibber, so as just to cover the bud when the soil was pressed firmly against it. The back of the leaf lying on the surface of the mould, was fed by absorbing moisture from it. The surfaces of the pots were quite covered with leaves, but so disposed that they did not overlap each other: they were then gently sprinkled with water, covered with bell-glasses, and placed on the flue of a forcing house. The sprinkling was afterwards frequently repeated, and the glasses shaded from the sun by hanging paper over them. In a short time, the buds were seen breaking the surface of the mould, and by the end of summer, had made shoots six and eight inches long, especially the camellias, which were then potted off. The others that had not made equal progress, remained as they were until the following spring, when they likewise were potted, and found firmly rooted. Since that time, I have tried other sorts with equal success; but perhaps plants that have large leaves are best adapted for this mode of culture.—*Id.* [Striking plants from buds did not originate with Mr. Knight: it was practised some time before his experiments were made. Three years ago, in 1838, the same year mentioned above, Mr. Pickering, late gardener to Mr. Sweetser, propagated many plants after this mode, and some of the camellias are at the present period nearly two feet high. We mentioned the experiments of Mr. Pickering some time since, (Vol. VI., p. 445,) and Mr. Sweetser has promised us an account of the experiments made, the kinds of plants propagated, and the success attending the same: this we hope soon to lay before our readers.—*Ed.*]

Cultivation of Pelargoniums, as practised by Mr. Cattleagh, one of the most successful growers.—About the middle of July, the soil of an open border is prepared for the cuttings. The situation chosen is exposed to the sun during the middle of the day. In about six weeks the cuttings are rooted, and they are then potted in No. 1 pots. To keep out the worms, they are set upon a temporary stage, in a shady situation, where they are allowed to remain three weeks, by which time the plants will be established in the pots. They should then be removed to a more exposed place, where the sun and air will properly harden the wood. Here they should remain till they are taken into the house, which is about the end of September, or sooner if there is danger of frost. The plants are stopped at the

third or fourth joint, at this time, in order to make them bushy, and are also shifted into No. 2 pots, using a little turfy loam and sand, with the compost below mentioned. For a few days, but little air is admitted, but at the end of this period, as much is given as the state of the atmosphere will allow, until the first of December, when the plants must be again shifted into No. 3 pots. A little fowl-dirt is added at this shifting, placing it near the bottom of the pot. The shoots are again stopped at the third joint, and the house kept at a temperature of 45° for ten days, and then allowed to fall to 40° or 42° , at which it is kept. The flues are damped *two or three times* every night, to prevent the air from becoming too dry.

About the middle of February, those plants intended as large specimen plants, are shifted again into No. 4 pots; those very strong into No. 5. A small stick is now put to each stem, to train them into uniform and well shaped plants. By the beginning of April, the plants are syringed over the tops, three times a week; the house is well damped every night at the bottom, and the top sashes opened the first thing in the morning, to allow the damp air to escape, and during the day all the air is admitted that can be given with safety. The plants, when beginning to bloom, are freely watered, and protected from the scorching rays of the sun, during the middle of the day, by means of canvass. When the plants are housed, all decayed leaves are removed, and if the green fly appears, the house must be well fumigated. This should be done when the plants are in a dry state, and they must be well watered the day following.

When the flowering is over, the plants are exposed to the sun and air, to harden the wood before being cut down. In July, when the plants are cut down, they should be placed in a sheltered situation, and but little water given; and as soon as the new shoots are an inch long, they are repotted into pots from one to two sizes *smaller*, the old soil being shaken from the roots, and good drainage given. When repotted, they are placed upon the stage in a shady situation, removed into the house at the proper time, and undergo the same treatment as above recommended for young plants. When these plants show their flowers, and are intended for exhibition, they receive additional care, and are watered with liquid manure occasionally: they are not syringed at the top: bees are kept out of the house by means of gauze blinds; they are never allowed to flag from exposure to the sun, or want of water. Training the stems to sticks must again take place, in order to bring the plants into proper and handsome shape.

The compost used is as follows:—two barrowfuls of good meadow loam with the turf; one barrowful well rotted cow dung, three years old; one peck sand; one peck bone dust. For winter potting, a little more sand is added.—(*Gard. Chron.*)

Cultivation of the Cacti.—On the 19th of May, a paper was read by Mr. Beaton before the London Horticultural Society, and the same appears in the *Proceedings* of the society lately published. Mr. Beaton is one of the most intelligent gardeners in England, and his remarks are worthy of the most attentive perusal. The following extracts from his communication will convey some valuable hints in the cultivation of the cactus tribe, now so much more admired than heretofore:—

The grand emporium for *Cacti* is Mexico, but vast numbers are found in all parts of South America. A few inhabit the sea coast, and some fine *cereuses* and *opuntias* have been found growing down to the water's edge, in the hottest part of the globe. Such species occur abundantly in open arid places, and seem to enjoy the reflection of the sun's rays from a naked soil, in addition to the scorching rays of the atmosphere. From this region up to the limits of perpetual snow, or nearly so, some are to be met with at every elevation. In the latitudes of the periodical rains, *cacti* are deluged three or four, or five months at a time, while they are completely dry for the rest of the year.

The author stated that the alpine species should receive the treatment of the heath house, and the *melocacti* which inhabit the interior tropical shores, a higher temperature than the rest of the family; in the latter the mean temperature of 55° is necessary even in winter; but if they are kept perfectly dry from October till March, they will live in a much lower degree. The great mass of the species do perfectly well in a temperature of 45° to 50° if they are kept near the glass.

With regard to soil, some grow in stiff yellow clay, mixed with rough gravel, and some in fine strong loam of different textures and colors; others are found in all kinds of light soil, in peat and among chalk and limestone, and even in the sterile lava of volcanic districts. Equal quantities of pounded oyster shells and coal clinkers form by far the best drainage that can be used, keeping the finest parts towards the top. A layer of moss, placed on the drainage, would kill the finest sorts of *Cacti*, and must never be used for them. When fresh potted, water is withheld for several days, in order to let any roots which may have been broken, have time to dry; otherwise, if moisture is applied to the wounds when fresh, death will soon be the consequence.

In growing *Cacti* from seeds, Mr. Beaton fills the pots with cinders to within two inches of the top, and makes them up with dry sandy peat and a little clean sand on the top. The pots are then watered and the seeds sown, after which as much dry sand is sprinkled over them as will just fill up the spaces between them; the whole is then pressed down gently, and the pots are put up in any warm place where they are kept moist. The seeds will vegetate in ten or twelve days, and must then be very gently watered for fear of displacing till they make their little roots, and get firm hold of the soil, after which they may be freely and regularly watered. The seedlings should not be transplanted while young, but the seeds should be sown thinly and the plants allowed to remain in the seed pots until they become crowded, which will be in from one to two years.

The author, in conclusion, adverted to the advantages of what may be expected from hybridizing *cacti*, and the production of new and beautiful forms and classes by judicious mixture of the various species.—(*Gard. Chron.*)

Camellia japonica var. *eximia*.—This beautiful variety is a very shy bloomer. We notice that in order to make it flower, a writer in the *Gardener's Chronicle* recommends placing the plants in the stove in March, in order to set their blossoms; by this means the writer was enabled to make them flower as speedily as any other plants.

Comparative results of nine sorts of Celery.—Mr. James Seymour, in the *Gardener's Magazine*, has communicated the result of an experiment upon nine sorts of celery, tried with a view to test the merits of the kinds. The seeds were all sown at the same time, and the plants treated all alike, and the result was as follows:—

Red Celery.

Bailey's Gigantic.—Out of sixty-three plants, fifty-two were solid, and eleven hollow. Grows quick, but runs.
Manchester Giant.—Out of sixty-nine plants, sixty-one were solid, and eight hollow. Coarse, and bad tasted.
Perkins's large.—Out of sixty-two plants, twenty-six were solid, and thirty-six hollow. Very bad; not worth growing.
Russian Pink.—Out of sixty-seven plants, twenty-five were solid, and forty-two hollow. Very bad; not worth growing.
Seymour's Solid.—Out of one hundred and forty-one plants, all were solid, and none hollow. Very solid, of a peculiar growth, and fine flavor.

White Celery.

Kentucky, or Lion's Paw.—Out of twenty plants, all were solid, none hollow. Very solid; of slow growth.
Law's Giant.—Out of sixty-eight plants, all were solid, and none hollow. Very solid; a good sort.
Siberian.—Out of twenty plants, all were solid, none hollow. Very solid; a good sort.
Seymour's Superb White.—Out of three hundred and twenty-four plants, all were solid, none hollow. A very superior sort, of large size, good flavor, and well adapted for early crops.

From this it appears that the new white celery of Mr. Seymour is the best variety. Next to that comes Law's Giant, a kind which has been cultivated here for two seasons.

Mr. Seymour's celery attains a very great size: some heads have been grown to the enormous size of fifteen pounds, after it was prepared for the table. If planted in good moist soil, as celery always should be, it rarely weighs less than eight or nine pounds. The seed is now offered for sale, and we hope to see it tried another season.—(*Gard. Mag.*)

Potting Roses in the autumn.—China roses, to do well, should be planted out into the border in May or June, and be allowed to make a thrifty growth. In September, they should be taken up into pots. A cultivator states that he takes the plants up with balls, puts them in pots according to the size of the plants, and half plunges them in a close pit, giving them a little bottom heat, shading them from the mid-day sun, and syringing them over the top every night and morning. In a fortnight or three weeks they will have filled their pots with fresh roots, and many of them will be covered with flower-buds. The best are then selected and carried to the green-house, where they soon flower. The remainder are brought in as they acquire sufficient strength.—(*Gard. Chron.*)

Potting Plants.—Every practical gardener knows that in potting plants a good system of drainage is of the utmost importance, and therefore I would recommend to his attention the following facts:—

I have been repotting and examining several hundred plants within the last few weeks. In potting the same plants last year, a great number of them were drained with old bricks pounded to powder, having, of course, a piece of flat pot over the holes, and some rough peat upon the top of the drainage. Others were drained in a more common way, that is, with small pieces of pots or bricks, but the latter not reduced to powder. I now find all those pots in which the brick dust was used, in better order, less infested with worms, and the plants themselves more vigorous and healthy. No experiment was thought of at the time this was done, but the results are most satisfactory.—(*Gard. Chron.*) [Nothing is of more importance in the growth of plants in pots, than proper drainage: it is the key to all successful cultivation. We have found, in our extensive practice, that plants potted in the manner first above named, that is, with fine bricks, (using those of a soft character,) on those coarser, and a piece of broken pot over the hole, thrive much better than those only partially drained. There is no one thing, in potting plants, which should receive more attention than the drainage.—*Ed.*]

Fuchsia fulgens, as well as many of its hybrids, is easily forced, and may be had in flower at all seasons of the year.—(*Gard. Chron.*) [We have a plant of this fine species, which is now in flower. From its habit, we should think it well adapted for forcing. When well grown, the plants are superb objects. Mr. Tidd, gardener to S. Sweetser, Fulton village, Woburn, has had great success in his cultivation of the plants, and has promised us an article on their management.—*Ed.*]

Late flowering Carnations.—When it is desirable to have late flowering beds of carnations, the plants should be propagated in April. Neither knife nor dibber is required either in preparing the cuttings, or pricking them out where they are to strike, nor any artificial heat, further than placing a hand-glass over them when pricked out. Having fixed upon the stem from which you mean to draw the piping, take the former in your left hand, and the top of the latter, with four or more leaves, between the two first fingers and thumb of your right, making a gentle, steady pull; the stem will give way at the place most suitable for making roots. Then, in a south border, where a place has been prepared for their reception, removing the surface equal to the area of the opening of the hand-glasses destined to cover the cuttings, to the depth of six inches, and filled with pure sand, neatly leveled, but not pressed with the spade or other instrument, the cuttings may be inserted, the sand settled with a gentle watering, and the hand light put over them. Treated in this way, one may safely calculate upon nine tenths of them taking root. Plants so obtained, will flower till winter sets in.—(*Gard. Chron.*)

Transplanting Trees in summer.—It has been doubted by many, that trees transplanted in the summer season, especially those of any size, could be made to survive. Whether it is advisable to make a practice of performing such operations at that season, is another question: but yet, there may be occasions when, from various causes, it may be advisable to remove a tree in the summer, rather than to cut it down. We well recollect, in our younger days, of transplanting four peach trees in the month of June, when in full leaf, and,

with a little care in watering, they grew and flourished as well as any removed in the spring, and bore fruit the next season. The subject, however, of transplanting in summer, has not occurred to us since, until we met with the following in the *Gardener's Chronicle*, and we commend it to the notice of our readers:—"In reply to the inquiry in your *Chronicle* of May 8, respecting transplanting large trees in full leaf, I beg to state, that at the Sheffield Botanical Gardens, we have for some time practised what we term the washing-in system, which has been attended with success in every instance. Indeed, I doubt not that, by this method, trees of considerable size may be removed at this, or any other season of the year, with safety. Towards the latter end of last May, I had occasion to form a block or screen in a situation fully exposed to the sun, for which purpose I transplanted a number of tall trees and evergreens, not one of which was injured by the removal; and a fortnight ago, we disposed of upwards of a dozen large horse-chestnuts, Spanish chestnuts, limes, sycamores, and birches, all from ten to eighteen feet high, in full leaf, to a gentleman in this neighborhood, the planting of which I superintended: all, at this time, exhibit no appearance of having been removed. In the first place, we make the hole where the tree is intended to be placed sufficiently large for the roots to be placed at full length, and in removing the tree, great care is taken to avoid injuring or cutting the roots. If a ball of earth is retained, so much the better, as it will assist in steadying the tree; but if well staked it is not of much importance. As it is essential that the roots be as little exposed to the atmosphere as possible, we provide sufficient earth, either sifted, or finely reduced by the spade or rake, and have in readiness as many buckets of water as will nearly fill the hole; the tree is then placed in its intended position, the whole of the water is then thrown over the roots, the fibres of which will be supported by it; the fine earth is then expeditiously sprinkled over the surface of the water, and gradually subsiding, fills all the interstices, and gives stability to the tree, which is further secured by three stakes, placed at right angles, which finishes the operation. The work must not be trodden down, as is often done.—(*Gard. Chron.*)

Brómus pratensis.—This species of grass is used in France for lawns. In the grounds of M. Vilmorin, at Verrères, this grass, sown by itself, is found to make an excellent close turf, and to remain of a dark green in the hottest summer months, and in a dry sandy soil. This is a fact of very great value, and it is placed beyond all doubt, by several acres of dry sandy soil having been for some years entirely covered by this grass, at Barres, where M. Vilmorin raises his seed.—(*Gard. Mag.*) [This species of grass would be a great acquisition to our agriculture, as well as to our gardens. In this country, where the sun shines with such intensity, and where the common grasses in the best of soils are literally dried up, even in tolerably moist seasons, it would be invaluable. For the purposes of lawns and pleasure grounds, if the above be correct, it will be invaluable to the possessors of villa residences.—*Ed.*]

Tarred canvass is recommended as a good covering to pits and frames. It may be nailed on the top edge of the pit, and made to

roll up on a roller. By putting nails in the frame, the canvass would be a good protection for the glass, as well as leave a space for air between. If nailed to wooden frames, it would form screens useful for garden purposes, and is cheap. The canvass may be of any thickness, according to the purpose for which it is required.—(*Gard. Chron.*)

Galvanic plant protectors.—An apparatus has lately been invented in England, called the galvanic plant protector; and it is said to perfectly secure plants from the depredations of all such insects as cannot ascend to the trees or plants by means of wings. It has proved an effectual barrier in all cases, when tried by the inventor, who has had it in operation in his garden twelve months, during which time plants on all sides have suffered severely while those which were protected by the galvanic apparatus, had not been injured. It is described as follows:—

The galvanic plant protector consists of a taper or conical ring of zinc, of the following dimensions: six inches diameter at top, the bottom four and three-fourths inches, and the height four inches. The top edge is flanged off about a quarter of an inch, and cut into numerous zigzag or vandyked points, as represented in a drawing. Immediately under this pointed flange, another ring, but of copper, is neatly fitted, being exactly of the same taper as the former, and full one inch broad, supported in its place by dots of solder, in three or four places of its circumference. Such is the apparatus; its operation is thus:—The bottom of the zinc ring being pressed into the soil, until the lower edge of the copper ring is about one and a half inches above the surface, the mollusca may crawl up the zinc with impunity, but on coming in contact with the copper, will receive a galvanic shock, and immediately turn away or fall to the ground. I have repeatedly watched them, and have observed they were extremely cautious in approaching a second time. I prefer the vandyked edge to a plain one, for this reason; if the larger of this tribe attempt to stretch across and above the copper belt, avoiding contact, they would be incapable of holding by the points. In fixing the galvanic plant protector, care must be taken to enclose within the ring the rods, which are attached to plants that require them for support, otherwise the mollusca would find a ready road to the plant by the rod. The apparatus acts in wet or dry weather, and is therefore always in action. Its appearance in use is like a flower pot, and its cheapness, utility and durability, must insure its general adoption.—(*Gard. Mag.*)

[We would recommend this apparatus to the notice of our readers. We intend to try it ourselves, for the destruction of the canker worm grub. We think it would be impossible for them to get over it: their soft bodies would form good conductors, and they would receive such a shock as to throw them off. The cost of each apparatus is only about 12½ cents a foot.—*Ed.*]

Watering Plants.—Watering out-door plants is frequently recommended during dry weather; but it should be avoided as long as possible, as the benefit of artificial watering is but temporary, and it has the effect of exciting the roots, thereby rendering them more liable to suffer when the water has evaporated.—(*Eng. Farm. Journal.*)

ART. II. Foreign Notices.

ENGLAND.

Great Exhibition of the London Horticultural Society.—The following account of the great exhibition of the Society, at the Chiswick Garden, on May 15th, will be read with great interest by every lover of plants or flowers: we only regret that we have not space for the whole:—

This long expected exhibition, with which the hopes and fears of so many persons were associated, took place on one of the finest of May days, with no north-east winds to chill the throng of visitors, nor a single threatening cloud to raise the apprehensions of the invalid. The gardens, too, with the rhododendrons and azaleas in full flower, the noble *Glycine sinensis* decorating the walls with its countless bunches of fragrant blossoms, and the bright, clear, full-grown foliage of the trees, uninjured by frost or drying winds, were in a state of greater beauty than is often seen at the close of an English spring. Five thousand seven hundred visitors filled the grounds, amongst whom were H. R. H. the Duke of Cambridge, the Duke of Devonshire, Lady Carlisle, Lady Dover, Lady Mary Howard, Lady Newburgh, Lady Bridport, Lady Grenville, Countess de Salis, the Marquis of Northampton; Earls Fitzwilliam, Carlisle, Talbot, Ilchester, Bradford, and Delaware; Lords Hill, Portman, Rodney, Burghersh, Oranmore, Sandon, Morpeth, Stavordale, and Prudhoe; Sir William and the Hon. Lady Middleton, the Hon. Mrs. Rushout, the Count and Countess Bjornstierna, Baron Blome, M. de Gersdorff, the American Minister and his Lady, together with a crowd of other persons of rank and station. The bands of the Coldstream, the Royal Horse Guards, and the 1st Life Guards played during the afternoon.

Never was there a more signal exemplification of the benefits which an institution like this is capable of conferring. The establishment of horticultural exhibitions, by encouraging competition, excites a degree of emulation which could not be obtained without the prospect of public praise or reward. Hence, though there was exhibited last Saturday a varied collection of whatever is either beautiful or rare at the present period, the most remarkable feature in the objects brought forward was the singularly successful manner in which they had been grown. The majority of the specimens possessed vigor and prodigality as well as richness of blossoms, which a knowledge of the true principles of culture and a correct acquaintance with the habits of individual tribes could alone have produced.

Azaleas formed one of the classes in which the most striking improvement has occurred. When the beautiful varieties now cultivated to such perfection were originally introduced, there was a barrenness of stem, a deficiency of foliage, and a scarcity of flowers which detracted much from their splendor. Enlarged acquaintance with the different modes of treating them has brought them into a totally opposite condition. In the specimens of Messrs. Green,

Butcher, Falconer, and others, the stems are barely perceptible; the shoots bend over the edges of the pots, and the blossoms and leaves are so dense that it is almost impossible to see through them, patches of the latter being only here and there visible, and thus giving greater brilliancy to the flowers. The character here spoken of was especially conspicuous in *A. indica lateritia*, *variegata*, *Smithii*, and a magnificent crimson variety in Mrs. Lawrence's group, with blooms of an immense size and dazzling brightness. It is probably the one called *A. indica splendens*. Mr. Green's double-red kind, though not so compact in habit, was likewise particularly showy. Next to azaleas, the cactaceous race was most noticeable. The *Cereus Jenkinsonii* and *Epiphyllum speciosum*, from Mr. Green, gardener to Sir E. Antrobus, Bart., of Cheam, were amazingly large, and well covered with blossoms. Specimens of the same kinds, together with a large *Cereus speciosissimus*, and a fine plant of *C. Mallisonii*, with its rich crimson flowers, were supplied by Mr. Butcher, gardener to Mrs. Lawrence, of Ealing Park; while Mr. Bruce, gardener to B. Miller, Esq., Tooting, exhibited a dwarfer plant of *Epiphyllum speciosum*, which was literally a complete mass of delicate pink bloom, and Mr. Jackson, of Kingston, contributed a charming *E. Ackermanni*, which was nearly as broad as it was high, and of the most elegant proportions: the flowers of the last were very gorgeous. In all these, and many more, which there is not space to mention, the high state of health, conjoined with the prodigious quantity of blossoms, elicited much admiration. The climbers dispersed through the larger collections, exhibited singly or arranged in detached groups, were a source of great allurements to the lovers of this interesting tribe. Considerable prizes having been offered for plants of this description, it was to be expected that there would have been a larger number of competitors; but the specimens were, on the whole, highly meritorious, and it is hoped that some of them will have the effect of inducing not a few cultivators to bestow on them that attention they so much deserve. Decidedly the most lovely, though not the most novel, of the climbing species, was *Tropæolum tricolorum*, a plant which will ever retain its high character. Two specimens of this, trained on a trellis, which partially covered the pots, the blossoms being disposed all over with as much regularity as if they had been purposely fastened in the proper position, were subjects of universal esteem; they were shown by Mr. Green. A large plant of *Stephanotus floribundus*, with its sweet-scented white blossoms just beginning to expand, formed a part of Mr. Butcher's main collection. *Gompholobium polymorphum*, from Mr. Barnes, gardener to G. W. Norman, Esq., was attached to a flat trellis, and its numberless large crimson flowers created a display which was hardly exceeded by any other object. From the same individual, there was a beautiful *Poirrea* (*Combretum*) *coccinea*, which shows that it can be grown almost as finely in a pot as when planted in the border of a stove. The vivid scarlet of its copious floral racemes was very conspicuous. There was considerable merit in the culture and training of *Zichya coccinea*, brought by Mr. Upright, gardener to G. C. Ridge, Esq., of Morden, and Mr. Wilson, of Streatham. *Zichya pinnosa*, from Mr. Butcher, was also exceedingly fine; and another

species of *Zichya*, from the collection of Miss Traill, was highly creditable to Mr. Hunt, the gardener there. A noble *Clematis Sieboldii* was sent by Mr. Garrett, gardener to Sir H. Jenner; an enormous *Zichya glabrata*, by Mr. Fraser, of Layton; and *Echites suberecta*, with its pretty pale yellow blossoms, together with *Thunbergia Hawtayneana*, having large deep blue flowers, appeared among Mr. Butcher's climbers. It is needless to specify the particular manner in which each species was treated. The principal things to be observed were, that they were grown on circular, cylindrical, flat, or other trellises, according to their habit; and that flat ones are preferred for those kinds which are of weakly growth, and produce great numbers of small flowers; while the more luxuriant sorts, and such as bear larger and scattered blossoms, are affixed to a cylindrical trellis, or to one in the shape of a barrel. In pelargoniums, a very great and manifest improvement has been effected since last year; and this is not so much in the size or figure of the flowers, as in their color, abundance, and the appearance of the plants. We never saw three plants so large and so similar in size, form, and habits, as those exhibited by Mr. Catleugh,—*Climax*, *Cecilia*, and *Discount*,—measuring nearly four feet in width. The specimen of *Victory* in Mr. Cock's collection was perfect. In the distribution of medals for these flowers our florist friends will be glad to know the names of the winning growers and varieties. The Gold Banksian was awarded to Mr. Cock, for the best collection of six varieties, containing *Jewess*, *Louis Quatorze*, *Joan of Arc*, *Bijou*, *Coronation*, and *Victory*; and among nurserymen, to Mr. Catleugh, for *Erectum*, *Jewess*, *Coronation*, *Florence*, *Victory*, *Una*: the large silver to Mr. Gaines, for *Beauty of Ware*, *Joan of Arc*, *Climax*, *Lineatum*, *Eliza superb*, *Juba*; Silver Banksian medals were also obtained by Mr. Gaines, for a brilliant seedling called the *Rising Sun*; and Mr. Catleugh, for *Prince of Waterloo*, a seedling variety, fine in habit, form, and color, a decided improvement upon *Jewess*, to which it bears a strong resemblance. A variety called the *Shrubland Scarlet*, well adapted for either pots or beds of the flower garden, must not be passed over. It has large leaves, and copious trusses of the most splendid scarlet flowers; Mr. Conway, of Old Brompton, was the exhibitor of this. Among the cinerarias, the best was one something like *King*, but larger and darker, from Mr. Kyle, gardener to R. Barclay, Esq., Layton, and a beautiful crimson variety from Mr. Green, of Cheam. Of *calceolarias* there was a profusion, the chief new ones being from Mr. Green and Mr. Catleugh, of Chelsea. A neat little variety was furnished by Mr. Standish, of Bagshot, which was spotted and blotched, like a leopard, on a yellowish ground. Much notice was taken of six *hydrangeas*, shown by Mr. Dowson, the gardener to W. Leaf, Esq., of Streatham; and for the size and form both of the individual flowers and heads, they were surpassingly excellent. Heaths of many kinds were abundant, and more than usually good. *Erica persoluta alba*, and *E. perspicua nana*, from Mr. Barnes, both presented a lovely mass of white blossoms; the former we can compare to nothing so well as a snow wreath. Mr. Plumbly, gardener to E. G. Dimsdale, Esq., produced *E. aristata major*, than which no variety is more showy; and a fine plant of *E. regerminans*, thickly load-

ed with its small pinkish-white flowers. *E. Hartnelli*, not inferior to *E. aristata major*, *E. elegans*, with a curious habit and delicate pink blossoms, and *E. ventricosa carnea*, which was little excelled by any other, were from Mr. Venables, gardener to W. Harrison, Esq., of Cheshunt. *E. ampullacea rubra*, and *E. Hartnelli nova*, beautifully grown, were sent from Messrs. Young, of Epsom. But the loveliest heath, and most charming specimen, was *E. propendens*, grown by Mr. May, gardener to E. Goodhart, Esq.; nothing could exceed the beauty of this plant, which was covered with pretty pink bells, and constituted, both from the immense quantity of its flowers, its low nature, and partially pendent habit, a perfect gem of its kind. In the above enumeration, simply a few of the most striking sorts have been noted; it would occupy half our columns to remark on all. Of specimen plants, not ranking with any of the foregoing classes, yet meriting distinction for their superior culture, such numbers presented themselves that only a selection can be named. In Mrs. Lawrence's collection were *Cytisus racemosus*, about six feet high, spreading in all directions nearly as wide; *Ixora Bandhuca*, with nearly thirty prodigiously large heads of flowers, looking like hemispheres of fire; *Acacia cordata*, a singularly graceful species, in remarkable perfection, and fully five feet high; with a plant of *Euphorbia splendens*, which would half fill an ordinary stove, studded all over with lively crimson ornaments. A specimen of *Chorozema cordatum*, from Mr. Barnes, was, perhaps, the most noticeable instance of good cultivation which the show afforded. Every one knows the rambling nature of this species, and how seldom it can be reduced within moderate dimensions. The plant in question was, however, of a greater diameter than height, the branches numerous, dense, hanging down over the pot, and having a bunch of uncommonly large blossoms at the extremity of each. In short, it might be regarded as a model of perfection; its beauty had apparently been caused by frequently pinching off the points of the young shoots. *Erythrina Crista-galli* was as well grown in a pot by Mr. Butcher as we have ever seen it in the open border. It no doubt requires merely a rich soil and plenty of pot room. The brilliant little *Lechenaultia formosa* was exhibited by several persons, but none had it finer than Mr. Falconer, gardener to A. Palmer, Esq., of Cheam: neither stems, branches, soil, nor the upper part of the pot were at all discoverable; nothing could be seen but a few spots of green foliage, and one blaze of glowing flowers. *Pimelea decussata* and *Coleonema pulchrum*, from Mr. Pawley, of the White Hart Inn, Bromley, were exceedingly well cultivated. *Boronia pinnata*, from G. Alston, Esq., of Birmingham; *Dillwynia speciosa*, from Messrs. Young, of Epsom; *D. floribunda*, and *Chorozema Dicksonii*, from Mr. Hunt, gardener to Miss Traill; *Campanula garganica*, shown by Mr. Taylor, gardener to J. Foster, Esq., Streatham; *Templetonia glauca*, from Mr. Upright, gardener to G. C. Ridge, Esq., Morden; with *Selago Gilliesii*, and *Ixora rosea*, from Mr. Venables, gardener to W. Harrison, Esq., all bore testimony to the sterling value of the plants and the great merits of their cultivators. If there was one object among the specimens which, after the *Chorozema cordatum*, carried away the palm for its splendor, and for the talent displayed

in its management, it was probably the *Helichrysum pumilum* of Mr. Bruce, gardener to B. Miller, Esq., of Tooting. We want the skill to describe this specimen; but it was most magnificent. The plants which obtained an entrance for the sake of their curiosity were *Chamærops humilis*, a dwarf half-hardy palm, with thick clusters of minute yellow flowers in the axils of its leaves. It was flowered and shown by Mr. Dowson, gardener to W. Leaf, Esq., Streatham. Another object which was singular, and at the same time very ornamental, was *Poinsettia pulcherrima*, from Mr. Edmonds, gardener to his Grace the Duke of Devonshire, at Chiswick. The scarlet of its bracts was unusually dark, owing to the lateness of its flowering; it was destitute of leaves, which rendered its aspect still more extraordinary. *Ardisia paniculata*, from its spreading pyramidal spikes of pink blossoms; *Aitonia capensis*, for the red hue of its flowers, which have the appearance of a red bladdery capsule; and *Bignonia picta*, a shrub with flowers not much unlike those of *Siphocampylus bicolor*—have all claims to beauty as well as singularity; they were exhibited by Mr. Venables, gardener to W. Harrison, Esq. New or particularly scarce plants were by no means so frequent as specimens of older ones; nevertheless, they were not quite wanting, and comprised a few that were very ornamental: *Gloxinia rubra*, exhibited by Messrs. Young, of Epsom, and Mr. Green, of Cheam, maintains its original character, and will be a great favorite. From Mr. Standish, of Bagshot, there was an enormous plant of *Fuchsia corymbiflora*, which, allowing for the injury it had sustained in travelling, is in every respect as fine as has been represented, and has bloomed all the winter in a warm green-house. *Fuchsia Youellii*, with long red flowers, seems a hybrid between *F. fulgens* and some of the smaller species. Cut specimens were at the exhibition from Mr. Youell. There were, moreover, cut flowers of *Aquilegia glandulosa*, from, we believe, Mr. Smith, gardener to C. Mills, Esq., of Hillington, which showed this species to be one of the handsomest hitherto introduced; they were of a beautiful blue color, with a pale whitish centre. *Pimelea spectabilis*, grown by Mr. Barnes, was very generally noticed; it had twenty-five bunches of its pinkish-white blossoms, and is of a better habit than most of its allies. A great number of medals were awarded for the various objects.—(*Gard. Chron.*)

ART. III. Domestic Notices.

Grafting the Peach with success.—I am not aware that any process has been devised for grafting upon the peach stock, with any certain prospect of success. Experiments doubtless have often succeeded

in rearing grafts upon peach stocks, but more often failed. A gardener in my neighborhood informed me that he once grafted upon one hundred peach stocks, and all the grafts died, and most of the stocks. (He was always successful in grafting upon other kinds.) Last year I was induced to investigate the matter with a view to devise some means of obviating this failure, as it is desirable in many cases to graft in lieu of budding, persuaded that although the discovery might be of no great practical utility, yet it would be an interesting acquisition to the science of arboriculture. The peach tree is of more rapid growth than any of our orchard trees, and frequently with us, in congenial soils, the first year from the seed, attains the height of six feet, with stems from one inch to an inch and a half diameter. The circulation, of course, must be very active, and the sudden check from heading down such a tree, will, in many cases, destroy it. But should it live, the roots continuing in a state of activity, the scion is overflowing, as it were, by the sap; that is, the sap flows so fast from the wounds, as to prevent the process of granulation, by which the coin is united to the stock. To graduate, then the supply of sap to the wants of the scion, is the primary object, and the measures necessary to secure this condition, are just those which tend to preserve the life of the stock after heading down. To carry my purpose into effect, I proceeded contrary to some of the ordinary rules for grafting. In the middle of July, I selected the scions from thirty trees, with four or five eyes, taking care to choose those which contained leaf buds. The stocks chosen, were moderately growing instead of thrifty stocks, and were trees of the growth of that season from the seed. Before heading down, I passed a long sharp knife down entirely round the tree, and severed all the lateral roots at the distance of three or four inches from the trunk, according to its growth. This done, the trees were headed down at a point where the stem was just the size of the scion, or a little larger, as the scions were inserted a little on one side of the pith. The insertions were made in the ordinary way of cleft grafting. The scions were then secured by a narrow strip of sheet lead, wound spirally over the whole length of the cleft, and a small ball of grafting clay put over the whole. To my gratification every scion inserted in this way grew off finely, and the coming season will doubtless make handsome trees. I do not know that the lead binding or mode of insertion is essential, and although I have tried no other plan, yet I presume that other methods will answer equally well, provided the preliminary steps are properly attended to. On other stocks I have grafted with success, with no other binding or protection than the strip of lead, and have used lead ligatures with great expedition and success in budding. The introduction of lead ligatures was merely an experiment with a view to expedite grafting and budding in large nursery operations. Thus far I am inclined to give the preference to the old methods. When heading down the stocks, I took care in every case to leave either one or two small shoots, some leaves, or several nascent buds, in order to continue all the functions of the tree until union had taken place between the scion and the stalk. As soon as the buds of the scion began to put forth, all below upon the stalk was pruned off. When the scions were taken from the trees, the leaves were all re-

moved as in budding, leaving only a small portion of the foot stalk. The clay and ligatures were removed in the fall, when vegetation had ceased, and the wounds were all well closed. I am not sure that it is absolutely essential to leave any thing growing on the stalk, and regret that I did not try some without.—*Charles G. Page, M. D., in Albany Cultivator.*

The Missouri Winter Squash.—This is a new variety of the squash, which originated in the west. We have before us a letter from Joshua Longstreth, Esq., of Philadelphia, addressed to S. Downer, Esq., of Boston, which accompanied a donation of a few seeds, some of which were kindly given to us by Mr. Downer, who also loaned us Mr. Longstreth's letter: the following is an extract from the same:—

"Knowing that you take a lively interest in every thing relating to horticulture and botany, I send you herewith, a specimen of the Missouri winter squash, or true vegetable marrow, and which, (if you do not already possess it,) will be found a valuable acquisition to your vegetable department. I received the seed of this variety about a year ago, from a friend in the far west, on the Upper Missouri, cultivated it successfully the last summer, and am much pleased with it, being rich, sweet, and nutritious, possessing the very desirable property of being fit for the table until the month of April, say for seven or eight months in the year, provided they are kept in a dry warm situation during winter, the quality, in my opinion, far surpassing all others of the squash kind.—*I am, very respectfully, thy friend, Joshua Longstreth.*"

New Camellias.—Dr. Gunnell, of Washington, whose excellent article on growing camellias in the *parlor* appeared a short time since, (p. 214,) has sent us the descriptions of two new ones which he has lately received. They will appear in our next.—*Ed.*

ART. IV. *Massachusetts Horticultural Society.*

Saturday, July 3.—Exhibited. Flowers:—From the President of the Society, a few specimens of picotee pinks from plants lately imported, and a variety of fine roses. From J. T. Smith, cut flowers of *Epiphyllum Ackermánii* and *Cereus speciosissimus*. From Dr. Thompson, Charlestown, several dahlias. From S. Walker, some new carnations and picotees, and several roses; also, *Ænothëra macrocarpa*, and fine large bouquets.

From Hovey & Co., bouquets. From S. R. Johnson, a fine display of Chinese and hardy roses. From A. Bowditch, roses and bouquets. From J. L. L. F. Warren, a few dahlias and bouquets.

Native Plants:—From B. E. Cotting, upwards of twenty species of native plants.

Fruit:—From J. F. Allen, Salem, some excellent George IV. peaches, and black Hamburg grapes. From W. Kenrick, Methven Scarlet strawberries. From J. A. Kenrick, handsome black Tartarian cherries. From H. Edwards, Boston, cherries without name. From Matthew Skelton, cherries.

July 10.—Exhibited. Flowers:—From S. Walker, a fine display of picotees and carnations as follows:—

Carnations:—Clarke's London (scarlet bizarre,) Downtons' Lancaster Lass, (red flake,) Thompson's Renetta, (red flake,) Yeoman's Metropolitan, (scarlet bizarre.)

Picotees:—Hogg's Miss Campbell, Sharp's Red Rover, Hafton's Mrs. Ray, Willmer's Bung, Grandissima and Venus, Diadem and Orson's Fair Flora, also fine large bouquets.

From S. R. Johnson, a number of Chinese and hardy roses and Martagon lilies. From F. W. Macondry, dahlias, viz. Fireball, Reliance and Marshal Soult. From D. McIntyre, an excellent flower of Ne Plus Ultra. From J. Hovey, bouquets and lilies. From H. W. Dutton, the following dahlias,—Ne Plus Ultra, St. Leonard's Rival, Climax, and Miss Johnson. From Miss Sumner, bouquets.

From Hovey & Co., splendid specimens of double dwarf rocket larkspurs, four colors, and a great variety of double clove pinks and picotees from seed: also bouquets. From W. Kenrick, pæonies, roses, white lilies, *Hemerocallis cærulea*, red Ohio lily, Siberian spiræa, variegated leaved spiræa, bee larkspur and bouquets of other flowers. From A. Bowditch, bouquets. From J. L. L. F. Warren, dahlias, viz.: Napoleon, Rienzi, Dennisii, Virgin Queen, Countess of Mansfield, *Striata formosissima*, Lord Liverpool, &c., also bouquets. From John A. Kenrick, *Rhododendron maximum*, lilies, roses, &c.

Native Plants:—From B. E. Cotting, fifteen species of plants, among which were fine flowers of the *Azalea viscosa* and *Spiræa alba*.

Fruit:—From J. F. Allen, very superior specimens of George IV. peaches. From George Walsh, Charlestown, a black cherry, supposed to be the black Bigarreau of Savoy. From S. Downer, fine Downer cherries. From Mr. Hawkes, Lynn, Methven scarlet strawberries.

July 17.—Exhibited. Flowers:—From Messrs Winship, large and fine bouquets. From W. Kenrick, bouquets. From Capt. George Lee, a handsome specimen of *Yucca filamentosa*. From Miss J. Bigelow, a handsome specimen of *Yucca gloriosa*. From Misses Sumner, bouquets. From A. H. Hovey, double rocket larkspurs. From W. Meller, a great variety of pinks.

From the President of the Society, some very large and extra fine specimens of the *Spiræa lobata americana*. From S. R. Johnson, Chinese roses, carnations, and picotees. From Joseph Breck & Co., a number of very beautiful seedling picotees, carnations, and pinks; some were quite select. From Hovey & Co., bouquets. From F. W. Macondry, Fire-ball, Suffolk Hero, and other dahlias.

From C. Golderman, handsome specimens of *Nerium splendens*. From W. Magoun, Cambridgeport, Sir Henry Fletcher, Middlesex Rival, and *Sulphurea elegans* dahlias, all good for the season.

From S. Walker, large specimens of *Cimicifuga foetida*, and carnations, picotees, and bouquets. From J. L. L. F. Warren, Høya carnōsa, or wax plant, carnations, verbenas, bouquets, and the following dahlias:—Rienzi, Julia, Napoleon, Dennisii, Lord Liverpool, &c.

Native Plants:—A variety of species from B. E. Cotting. From W. Lincoln, Worcester, *Asclēpias tuberosa*, *Lilium philadelphicum*, canadēse, and supērbum.

Fruit:—From Hovey & Co., fine specimens of *Franconia* raspberries. From S. Pond, handsome *Franconia* raspberries, and red and white Dutch currants. From Messrs. Winship, black mulberries, from seedling trees. From J. Hovey, red and white Dutch currants, and fine large gooseberries. From Mr. Walsh, black cherries without name. From W. Mackintosh, red and white Dutch currants, and *Franconia* raspberries. From Dr. Z. B. Adams, white Bigarreau cherries.

July 24.—*Exhibited*. Flowers:—From Messrs. Winship, several fine carnations, *Passiflora alata*, *Gloxinia alba*, and other flowers. From S. Walker, large and showy bouquets. From P. Barnes, Ne Plus Ultra and Suffolk Hero dahlias; also two fine specimens of *Gladiolus floribundus*. From Mr. Tidd, gardener to S. Sweetser, very handsome specimens of *Nerium splendens*, the Triumph of Luxembourg and yellow Tea roses; also, a fine flower of the dahlia Eva, with bouquets, verbenas, &c.

From S. R. Johnson, Chinese roses, hollyhocks, carnations, and bouquets. From John Hovey, carnations and bouquets. From Hovey & Co., specimens of the *Thunbergia alata*, *T. alata alba*, and the splendid new one, *T. alata aurantiaca*, the latter of a rich brilliant orange; also, bouquets. From W. Kenrick, bouquets. From Jos. Breck & Co., seedling carnations and picotees of great beauty. From J. L. L. F. Warren, several dahlias, carnations, verbenas, and bouquets.

Native plants, of several species, from B. E. Cotting.

Fruit:—From J. F. Allen, Salem, very superior Geo. IV. peaches; the Committee tasted the fruit, which they found to be excellent for forced peaches: Mr. Allen has been very successful in his cultivation, having annually produced about three hundred peaches on one tree: also a fine cherry, of medium size and dark rich color, the name unknown, but its merits entitle it to general cultivation. From J. Hovey, gooseberries and black mulberries. From W. Kenrick, gooseberries. From Messrs. Winship, black mulberries from seedling trees. From A. D. Williams, large and superior red and white Dutch currants.

From Hovey & Co., large *Franconia* raspberries. From S. Pond, *Franconia* raspberries. From W. Mackintosh, fine red and white Dutch currants, and *Franconia* raspberries. From J. L. L. F. Warren, Warren's Transparent cherries.

Vegetables:—From Mr. Tidd, gardener to S. Sweetser, shelled beans.

ART. V. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
	\$ cts.	\$ cts.			\$ cts.	\$ cts.	
Potatoes:				Summer squashes, per doz:			
New, per bushel, ...	1 00	1 25		Bush, ...	17	20	
Early white, per bushel, . .	1 00	—		Crookneck, ...	25	—	
Old, per barrel, ...	1 00	1 25					
Turnips:				<i>Fruits.</i>			
New, per bunch, ...	6	8		Apples, dessert, new:			
Onions:				Common, per bushel, . . .	1 00	1 25	
New red, per bunch, ...	6	—		Early Harvest, per h'f p'k	25	—	
New white, per bunch, . . .	4	6		Dried apples, per pound, .	3½	4½	
Beets, new, per bunch, ...	6	8		Pears, per half peck:			
Carrots, new, per bunch, . .	6	—		Juneating, ...	25	—	
Parsnips, per bushel, ...	75	1 00		Green Chisel, ...	37½	50	
Radishes, per bunch, ...	3	4		Sugar Top, ...	37½	—	
Shallots, per pound, ...	20	—		Peaches, forced, per dozen:			
Garlic, per pound, ...	12½	—		Extra fine, ...	4 00	5 00	
Horseradish, per pound . . .	—	—		Common, ...	3 00	—	
<i>Cabbages, Salads, &c.</i>				Raspberries, per box:			
Cabbages, early, each, ...	6	8		Common, ...	20	25	
Cauliflowers, each, ...	12½	25		Franconia, ...	25	37½	
Lettuce, per head, ...	2	3		Apricots, per quart, ...	37½	—	
Rhubarb, per pound, ...	3	4		Currants, per quart:			
Peas:				Red Dutch, ...	6	8	
Green Prolific, per bushel, .	1 00	—		White Dutch, ...	8	10	
Marrowfat, { per bushel, . .	1 25	—		Black, ...	8	10	
{ per peck, . .	30	—		Blackberries, per quart, . .	17	20	
Beans:				Thimbleberries, per quart, .	20	—	
String, per half peck, ...	12½	37½		Mulberries, per quart:			
Shelled, per quart, ...	17	—		English black, ...	37½	—	
Corn, early white, per doz., .	12½	—		Common, ...	25	—	
Tomatoes, per dozen, ...	25	20		Whortleberries, per quart, .	6	—	
Cucumbers, (pickled) pr gal.	25	—		Blueberries, per quart, . . .	6	—	
Peppers, (pickled) per gallon	37½	—		Gooseberries, per quart:			
<i>Pot and Sweet Herbs.</i>				Large, ...	25	—	
Parsley, per box, ...	12½	—		Common, ...	12½	—	
Sage, per pound, ...	17	20		Cherries, per quart:			
Marjorum, per bunch, ...	6	12½		Common, ...	8	10	
Savory, per bunch, ...	6	12½		Watermelons, each, ...	20	25	
Spearmint, (green,) pr. b'uch,	3	—		Muskmelons, each, ...	12½	25	
				Cucumbers, per dozen:			
				Extra, ...	25	—	
				Common, ...	12½	—	
				Cranberries, per bushel, . .	2 00	—	
				Grapes (forced,) per pound:			
				Black Hamburg, ...	—	—	

REMARKS.—Never, since we have reported the state of the market and crops, have we known so dry a summer as the present. At the date of our last, drought had then done serious damage to the various crops. Rain was, however, daily expected, and there have been appearances of easterly storms; but these signs have all disappeared, and only a few showers have occurred, probably not to the depth of an inch of rain.

Vegetables.—The early potato crop has suffered severely, and unless rain soon falls, the late crop will be far below the average product. Owing to the great quantity of rain which fell in April, and prevented early planting, potatoes have not come in so early as usual: the old crop being about gone, those of the new command good prices. Turnips, beets, &c., are plentiful for the season. Cabbages have not yet been brought in, except the early kinds. Greens of all sorts are gone. Peas have been very scarce, and prices high, owing to the drought. String beans are tolerably abundant. Tomatoes are brought from New York in considerable quantities, but the price yet holds up, so great is the demand for them. While the weather has been so adverse to most plants, the tomato is much benefited by the dry and warm season. Autumnal marrow squashes now come to hand of good size, and tolerably well ripened; but the vines have suffered severely, and there is some doubt about a full crop. Summer squashes, of both sorts, are now brought in.

Fruit.—New apples have made their appearance in great abundance, since our last: great quantities are brought from the south: a few superior early Harvest came to hand from the vicinity. Pears have been unusually abundant, and the market is supplied with four or five kinds, some of which are brought from New York. Peaches, of forced cultivation, have been brought in freely, and sold at our quotations. It is gratifying to see gentlemen of wealth encourage the skill of the horticulturist, while, at the same time, he delights his friends and gratifies their appetites. Apricots have not been very plentiful. Watermelons and muskmelons, from the south, are now abundant, a full supply having arrived. Grapes are good, and command our prices. Cucumbers are scarce for this late season: the dry weather has nearly killed the vines, and there is probably not one fifth of the crop expected. Cherries have been abundant. Blueberries, and other wild sorts of berries, have been very plentiful, and of large size. Of raspberries, there has been rather a scanty supply.—*M. T., July 30, 1841.*

HORTICULTURAL MEMORANDA

FOR AUGUST.

FRUIT DEPARTMENT.

Grape vines in the green-house and grapery will soon be coloring their fruit, and will require attention. If any mildew should make its appearance, the vines may be syringed with whale oil soap, or

with sulphur water. The shoots should be kept well tied in, and all superfluous ones cut out. Syringe freely, and give an abundance of air, leaving the sashes open all night, unless there are signs of rain.

Strawberries.—Now is the season to prepare for new plantations, so that the plants may be set out the latter part of the month, or early in September. The soil should be well dug up and manured with old compost, and the plants may be then set out. Old beds should receive attention. Keep them clear of weeds, and cut off the superfluous runners, if they are not wanted to fill up the bed.

Budding should be done this month. Cherries and plums in particular should be attended to. Pears, apples, and especially peaches, may be put off later.

FLOWER DEPARTMENT.

Dahlias.—Owing to the dry season, dahlias are now suffering; yet they do not look so bad as we have seen them in more favorable years, and we predict a good bloom, if rain should fall soon. They will need care. Keep the branches well tied up, and cut away all superfluous wood. Hoe frequently, and if the soil gets hard by trampling upon the surface, let it be lightly forked over.

White lilies, and similar bulbs, should be taken up now if it is desirable to increase them.

Chrysanthemums should be repotted this month, into No. 4 pots.

Geraniums may be propagated all this month.

Camellias should be duly watered and freely syringed over the foliage. Where there is a large collection, repotting may commence the latter part of the month.

Cactuses will require occasional supplies of water.

Roses of the hardy kinds may now be budded. The Chinese and other tender sorts may also be layered this month.

Oxalises of some kinds may be potted the latter part of the month for early flowering.

Mignonette and **sweet alyssum** may be now sown in pots for flowering in winter.

Verbenas wanted for keeping over the winter, should now be layered into small pots, or cuttings put in so that the plants may be well established before cold weather.

Pansy seed should now be planted for early flowering in the spring.

Ericas may be repotted if they require it, and cuttings inserted in May will now be rooted so as to be potted off.

Chinese primroses should be now repotted into No. 4 pots, in which they are to flower during the winter.

Orange and lemon trees should be budded in August.

Azaleas may now be propagated from cuttings with success.

Cantua coronopifolia seed sown now, will produce fine plants for blooming next summer.

Green-house and hot-house plants will require considerable attention this month. They should all be looked over preparatory to removing to the houses in September.

THE MAGAZINE

OF

HORTICULTURE.

SEPTEMBER, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *Notes made during a Visit to New York, Philadelphia, Baltimore and Washington, and intermediate places, from Aug. 8th to the 23d, 1841.* By the EDITOR.

It is now upwards of two years since we have had the pleasure of visiting either the cities of New York, Philadelphia, or Baltimore. At that time, when in the latter place, we were desirous of calling upon some of our friends and correspondents in Washington, but want of time prevented us from availing ourselves of the pleasure of doing so. During our present visit we determined to extend our tour farther, and, for the first time, saw Washington. The object of our visit at the latter place was mostly to note down the general state of horticultural improvement at the seat of government,—to inspect the commercial gardens of the city,—and, from the statements which have been made, in relation to the grounds attached to the President's house, and the *extravagant* expenditures for their improvement and keeping, to have the opportunity of gratifying ourselves with a visit.

In 1831 we first visited New York and Philadelphia, though at that time we did not take that interest in noticing the state of gardening, which we have since. We did not, however, let the opportunity pass without visiting several of the finest gardens. But again, in 1835, we made it our special purpose to extend our visit to as many of the best gardens, which then

existed, as possible; and the impressions then made upon our mind have been given at some length by us in our first volume. By contrasting our remarks at that time with what we shall have to offer in the present article, a distinct idea will be obtained of the rapid progress of horticultural improvement in this country.

Probably no one thing has tended more to the diffusion of new and rare plants, in the several cities which have been named, than the facilities which are afforded by the transportation of plants by rail-road communication. It has, in truth, been the great means of placing in the hands of amateurs and cultivators of plants, objects which, otherwise, must have long remained with the original importer and propagator. But, thanks to the enterprising character of our countrymen, this has not been the case; by the facilities which are afforded, plants are now disseminated as rapidly over one half of the Union, as they were in former years in the immediate vicinity of our large cities.

Another means of the rapid spread of a taste for plants may be found in the frequent intercommunication, which has taken place between the gardeners and amateurs of the several Atlantic cities, by the rapid source of rail-roads and steam-boats. Visits are often made, with a view to inspect the collections of plants, and for the purpose of selecting such as are new and rare, and also to note the improvements which are continually taking place in the cultivation of the numerous tribes which now enrich our gardens. Our only wish is, that such frequent personal communication may have the tendency to do away with much of the jealousy which now exists between gardeners and amateurs, that there may be more mutual good feeling existing among them; and that their united efforts may be more effectual in advancing the great interests of horticultural improvement.

New York, Aug. 9th.—Our visits were first made in this city; and though some of the places have been before noticed, there have been so many additions of new plants, and improved methods of cultivation introduced, that we believe our readers will find much to interest them.

Residence of J. M. Bradhurst, Esq., above Haerlem.—This fine old place has been in possession of this family for many years. It is situated just beyond Haerlem, near the Eighth Avenue, and bordering upon the Hudson river. From the

garden front, fine views are obtained of the water; and though the scenery is not of that grand character, which is the charm of that noble stream, still it is sufficiently interesting to add greatly to the situation.

Mr. Bradhurst is a gentleman of wealth and leisure, and spends a great portion of his time in the cultivation of his garden. Although he has an excellent gardener, many of the camellias have been inarched, and other plants propagated, by his own hands. The green-house is about fifty feet long, with an adjoining hot-house, twenty-five feet. Both are built against a rather steep bank, so that the back wall scarcely projects above the ground. From the flower garden there is a descent of a few steps to the range of houses, and still further down, in the hollow in front, is the kitchen garden, which was formerly a very low situation, but has been filled up so as to make a desirable spot.

The flower garden, containing about one eighth of an acre, in the form of a square, is laid out in small beds of various shapes, with box edgings. Each of the beds we found full of annuals and perennials, and green-house plants turned out of the pots into the ground. The cypress vine, trained in a pyramid form, was flowering beautifully. Some fine large erythras were blooming very strong. Among other things we noticed a good variety of the Bourbon roses, which were in full bloom. Mr. Bradhurst makes it a practice to plant out all his large orange and lemon trees in the border, and take them up in the fall; by this means they make a good growth, (after being pruned,) and, if taken up carefully, do as well as if they had not been moved.

Bignonia radicans and *grandiflora*, both stand the winter perfectly well here, and when we saw them, were flowering abundantly; the latter more so than the former, and making a rich display with its large trumpet-shaped orange red blossoms. In some seasons Mr. Bradhurst has covered the vines by winding a little straw around them to prevent the bad effects of freezing and thawing.

The collection of camellias is tolerably large, embracing some good plants of *Floyii* and other fine kinds, together with several seedlings raised by Mr. Bradhurst, which have not yet flowered; the collection of cactuses, and other plants, is also good.

In the garden front of the house are some fine large willows,

planted by Mr. Bradhurst's father, which are now sixty feet high, with their weeping branches falling to the ground. Such fine specimens we have rarely seen. On the eastern front Mr. Bradhurst has himself planted some good masses of pines, which obstruct the view of the house from the street, and afford protection from the winds. We left this place, highly pleased with our visit.

Fort Washington, R. F. Carman, Esq.—The upper part of the island contains many delightful situations for villa residences, particularly on the borders of the Hudson river. Beyond Haerlem, the surface is broken by gentle undulations, and, in many places, so well wooded as to render many situations exceedingly picturesque and beautiful. We learned from our friend, Mr. Dunlap, who accompanied us, that several individuals have selected some of these fine spots for their country residences, and have already commenced building.

Fort Washington is highly interesting from its historical associations. It is situated immediately upon the Hudson river, forming a steep bank of several hundred feet, from which the surface rapidly descends to the north, east, and south. It was probably from its more inaccessible character than any of the heights near it, that it was selected for a fort in the revolutionary war. It will be recollected by those who are conversant with the history of that period, that this fort was garrisoned by the American troops to the number of nearly three thousand men, under Col. Magaw; and when the American army retreated to the Jersey side, it was the wish of Gen. Washington that this fort should be evacuated. But Gen. Greene, who had the supervision of that portion of the army, deemed it advisable for them to remain, until it was too late, and retreat rendered impossible. The result was a severe engagement with the English: the troops were driven into the fort, and there compelled to surrender to Gen. Howe. Mr. Noble, the gardener, informed us that, in ploughing and cultivating the ground, he has dug up numerous cannon balls, bullets, &c., and he showed us some which had lately been taken out of the soil.

Fort Washington is four miles beyond Haerlem, and about eleven from New York. The direct road is over the Eighth Avenue; but from the rail-road depot at Haerlem it is a short ride. The house is built directly upon the spot where the fort was erected, and very little trace can now be seen of the

old redoubts. From the house, which fronts the river to the west, a magnificent view is obtained of the Hudson, with its waters whitened with a hundred sail of vessels, and numerous steam-boats which daily pass up and down. The entrance front is from the east, from whence another view more varied presents itself; in the distance runs the East river, and emptying into that and extending inland, and beyond the fort to the north, the Haerlem river winds its way; the foreground is enriched with the rich valleys and thickly wooded hills which lie between.

The flower garden is on the north of the house. A fine green-house has lately been erected, about fifty feet long, which we found partly filled with a good collection of camelias; among them we noticed *Donckelaëri*, Dunlap's americana, &c. Adjoining the green-house is a small stove, with a pit, which is intended for flowering roses in mid-winter. Part of the pit was already planted. It is the intention of Mr. Carman to put up, in addition, a grape-house.

There are two very large sago palms (*Cycas revoluta*) here, which, in connection with the name of the place, are interesting objects. These plants are many years old, and were purchased by Mr. Dunlap ten years ago from the collection of plants at Mount Vernon, which formerly belonged to Gen. Washington; and they are probably the only two relics left of that once very fine collection, as the green-house or conservatory, together with all the plants, was consumed by fire a few years ago. The plants are in full health, and occupy a prominent place, which they fully deserve, at the junction of the main walks in the centre of the flower garden.

Nothing pleased us so much as the appearance of the fine plants of *Allôysia citriodora*, of which there were ten or twelve in number, each five to six feet high. These were only two years old from the cutting, and were pruned and trained as standards, having a clean stem about three feet high, and then branching out so as to form a fine head, three to four feet broad, and two to three feet high: every branch was terminated with a raceme of its not inelegant flowers, and the foliage of the most vigorous growth. These plants, from their rapid growth, afford a constant supply of young shoots, which are very desirable for bouquets, from the highly fragrant character of the leaves. Mr. Noble informed us that these plants were struck from cuttings two years ago; and after making a vigo-

rous growth the first season, during which time they were planted in the open ground, and trained to a single shoot, they were taken up and laid in the cellar, just covering the roots with a little earth, in the same manner as was lately done with the *Morus multicaulis*: in the spring they were again planted out, the main branch having been headed down to about three feet: during the year they branched finely, and at the end of last autumn they were again carefully lifted and placed in the cellar, as in the previous winter, and this spring removed to the border again. Under this treatment they have become beautiful objects, and with no more care than would be given to the most ordinary green-house plant. Planted out alternately on the back of a border, with standard roses, they are showy objects in the garden, setting aside the great value they possess for the citron-scented odor of their foliage.

Mr. Carman has a very good collection of standard roses, among which we noticed the Perpetual Rose du Roi and white Perpetual Moss, some of the Isle du Bourbons, and other sorts, the whole in good condition, with fine branched heads. The collection of tender roses is also good, embracing many of the new teas and Bengal kinds. The camellias are all very well grown under the care of Mr. Noble.

Passing through the vegetable garden, we noticed a frame erected after the manner we have recommended in our Vol. I., p. 403, where we have given an engraving. It has been found to work admirably, so far as it has been tried: it was not put up till late in the spring, after early forcing had commenced: the coming year Mr. Noble will probably commence forcing early in February. The largest tomatoes we have ever seen were growing here; some of the fruit would measure six inches or more in diameter. This could not arise from cultivation alone, as Mr. Carman's plants were no more vigorous than those we saw at other places, and we spoke to Mr. Noble to save us a few seeds, which he kindly promised to do.

The flower garden is laid out in angular shaped beds of small size, occupying a square of about one hundred feet, with the walks edged with box. The only fault we have to find with the plan is the narrowness of the walks, not being above two feet wide, and, consequently, not allowing two to walk abreast. The same error we saw committed at other places. It should be laid down as a rule, never to make the walks less than three feet wide, and if three and a half, it will be better.

The borders were filled with a fine collection of dahlias, phloxes, beautiful annuals, &c. Mr. Carman intends to make many improvements upon his place, and has already commenced widening and altering the main approach to the house. We only regret that we did not find Mr. Carman at home, when we made our visit.

(*To be continued.*)

ART. II. *Remarks upon the State of Gardening in Ohio; with Practical Observations on the Cultivation of many of the best Varieties of Fruits, Flowers and Vegetables in that Climate.* By Dr. S. P. HILDRETH, Marietta, Ohio.

In the following article, I propose giving you a sketch of my gardening operations for the last few years; not with the expectation, however, of contributing any thing new, but that you may see we are not entirely neglectful of the subject. My grounds are divided into two separate pieces, lying at right angles; so that in passing out at the corner of one piece, we enter into the corner of the other. They were not so arranged from choice, but from necessity, being town lots. The first contains one sixth of an acre, and on the front of it is built my dwelling-house. The surface is nearly level, and is devoted chiefly to a flower garden; with the borders occupied by grape vines, plums and quince trees. It is enclosed either with buildings or a wooden fence ten feet high, against which are trained the vines. On two sides of one of the buildings are trained, as wall fruit, two Seckel pear trees, covering a surface of three hundred and sixty square feet. They produce much larger fruit than standard trees, and are the only trees that have not suffered from blight. The exposure being north and east, they are less affected by the heat of the mid-day sun. By thus training to the walls, fine fruit can be produced without shading the ground for other purposes. The other division of the garden contains nearly half an acre, and lies with a gentle inclination to the east. It is enclosed with

a tight board fence six feet high. The western quarter was originally occupied with pear trees; but these all perishing with the blight soon after they came into a bearing state, have been partly replaced with choice apple trees, and partly by new pear trees. The easterly three quarters, is mainly devoted to a vegetable garden, and the cultivation of the minor fruits, such as strawberries, raspberries, gooseberries and currants. On the north border is a row of the pound or large winter pear trees; on the south, flowering shrubs, roses, buffalo berry, &c.

The soil, when it came into my possession, was a stiff whitish clay; but by putting on every autumn, a liberal dressing of manure and sand, with an occasional sprinkling of lime, and deep trenching, it has become as rich and pleasant a soil as any gardener could desire to turn up with his spade. Across the west end of the vegetable garden stands a row of peach trees, embracing some choice varieties received from Mr. Kenrick, of Nonantum Hill. These are protected from the ravages of the peach insect, by enclosing the base of each tree in a box one foot square and six or eight inches deep, filled and heaped up with the cinders and ashes of bituminous coal. Early in November the box is raised, and the covering of the roots removed so as to lay them bare to the frosts of winter. At this time careful search is made for such of the larvæ as may have escaped my eye in the spring, or may have been hatched from eggs introduced into the bark near the top of the ashes during the summer.

In April following, the trees receive a thorough dressing of soft soap, thinned with a little urine, and laid on with a painter's brush as high up as a man can reach. The same composition is applied to all my fruit trees, especially the younger ones. It gives the bark a smooth, healthy appearance, far preferable to the white-wash usually applied, and promotes the growth of the trees. Under this course the foliage of the peach has a rich, deep green color. The disease called the "yellows," has not yet appeared in this portion of Ohio. For blight in pear trees, the best remedy that has fallen under my notice, has been to dig away the earth for three or four feet around the roots of the trees, and apply about half a bushel of coarsely powdered charcoal and a pound of flour of sulphur. This quantity is sufficient for a tree, ten or fifteen years old. By this course the disease was arrested in two bearing trees for a

number of years. It should be renewed every three or four years. Cutting off a portion of the roots has also been tried on some of my trees, and apparently with benefit.

The raspberry chiefly cultivated is the red Antwerp; but it requires to be laid down every autumn, and covered with earth or straw to protect it from the freezing and thawing of our variable winters. Plants which stand under the north side of a fence or a building bear the winter in a manner unharmed. This is also the case with the Madeira grape vine and Greville rose, both of which are killed if exposed to the mid-day sun of winter, but live uninjured if grown in a northern shaded exposure. The gooseberry and some of the foreign grapes, especially the white Chasselas and black Hamburgh, are very liable to be injured by mould or rust. For this lime and sulphur water is a pretty certain remedy, if applied in season; but we hope to remove this, as well as many other troublesome pests, as soon as Mr. Haggerston's remedy can be procured, a solution of fish-oil soap. The rose slug, for which this remedy was discovered, has latterly been very destructive to the foliage of my strawberry plants, especially Keen's seedling and the pine-apple, but a thorough wetting with the new remedy, I hope, will hereafter remove the evil. The "upholster bee" has latterly been nearly as troublesome as the slug to our smooth leaved roses and some other plants, such as Champney's multiflora, and the Otaheite and *Wistaria frutescens*, cutting two or three large elliptical pieces from nearly every leaf.

EARLY CUCUMBERS.

For out of door culture, and to those who do not wish to be at the trouble of a frame, my manner of raising this desirable vegetable may perhaps be useful to some of your readers. Early in April, or generally when the peach is in blossom, take the dish of a flower pot, or bason, and fill it half full of loose rich earth or chip manure. On this scatter a quantity of the seeds of the early Russian cucumber, and cover them with a folded flannel cloth of two or more thicknesses. On this pour scalding hot water, sufficient to wet the whole thoroughly, set it in a warm place near the stove or fire-place, and keep the whole moist by occasional sprinklings with warm water. In two or three days they will germinate, and when

the roots are an inch long they are ready for planting. The ground is thus prepared:—a hole is dug a foot deep, and eighteen inches square; fill this to within four inches of the top with old mulch and well rotted horse manure. It is then filled up and raised a few inches above the surface with light garden mould, sloping a little to the south. Four or six of the plants are then set in shallow holes near the centre of the hill, and the cotyledons or seed leaves lightly covered. A box eight inches deep at one end and six inches at the other, of a size to receive a pane of ten by twelve glass, which is puttied into a groove similar to a window-sash, is then placed over each hill. To promote the absorption of caloric, the surface of the hill should be sprinkled with charcoal powder or soot. When the box is well bedded in the soft earth, raise a low embankment around the outer edge with the trowel, to exclude the cold air. In two or three days the plants will appear above ground, and by covering the glass with a bit of board or shingle at night they will stand a smart frost unharmed. This cucumber, when fully grown, is only from four to five inches long, and two inches in diameter; and is the most tender, juicy and high flavored variety of the whole tribe. I have now cultivated it for twenty years, and preserved the seed pure from any other mixture. In this climate they are fit for the table generally early in June. As the plants rise to the under surface of the glass, the box is raised by a bit of brick, or wholly removed. This variety runs but little, and they will produce better by sticking them as you do peas.

EARLY PEAS.

The early May pea, or early Charlton, grown in the open ground, is generally fit for the table by the 20th of May, if planted in March. In years past I made a practice of preserving the first formed pods for seed, and in this way accelerated their ripening by about a week. The same course has also hastened the growth of the early Russian cucumber fully as much. In our deep rich soil the “pie plant,” or *Rhœum undulata*, grows with great vigor and luxuriance, and we have it for use early in April or in March, if protected and warmed by covering the roots with a flour barrel. I have grown it for ten or twelve years, and consider it one of the most valuable productions of the garden.

GRAPES.

Of the grape, my garden contains the following varieties: Isabella, Catawba, Constantia, Madeira, Bland's Madeira, Miller's Burgundy, black Hamburgh and black Raisin. The stems of several of the Isabella and Catawba vines measure from eight to twelve inches in circumference near the ground. They are trained on close wooden fences, or the walls of buildings, and some of them are kept in place by horizontal wires. The surface is usually, every spring, covered with a coat of lime white-wash, in which is diffused a liberal sprinkling of sulphur. During the heat of summer the fumes of this mineral protect the foliage from the depredations of the thrips and other small insects. A close or continuous surface is considered necessary to guard the blossoms and tender grapes from spring frosts, and to radiate heat in ripening the fruit. Grapes on open trellises or arbors generally ripen poorly. All the cardinal points of the compass are embraced in the exposures of the vines, and all of them ripen their fruit. The south and west ripen first, the north and east last. The Isabella is considered to be the most rich and luscious of our native grapes. The Catawba, when fully ripe, is nearly or quite its equal. With us it is more apt to rot when two thirds grown, if the season is wet and the roots not well drained. It will bear much closer pruning than any other native variety that I am acquainted with, and in this respect, as well as in the complexion of its wood, closely resembles some of the finer foreign grapes. The Catawba is soonest ripe, usually early in October or last of September. The Isabella is not fully ripe till late in October, unless in a south exposure, but is picked and eaten by many persons when the skin becomes of a deep purple. When fully ripe, the honey-bee and wasp are very troublesome visitors, eating holes into the fruit, and sucking out the luscious juice, letting in the rain, which soon produces decay and the wasting of much of the crop. The only remedy is covering the vines with a screen of millinet. Bland's Madeira is a fine grape and ripens well, as does also the Lisbon or foreign Madeira; but the vine needs protection in the winter. When down I usually let them lay on the ground till the spring frosts are past, thereby insuring a crop. Unless a remedy is found in the fish-oil soap, I shall abandon the cultivation of the black Hamburgh in the open ground, so subject is the foliage and fruit to mould and decay when about half grown.

FIGS.

The purple and yellow varieties of this delicious fruit ripen very well with us in the open air, if the wood is carefully protected from frost during winter. A tree of each has borne fruit in my garden for several years.

APRICOTS AND PEACHES.

The first are certain bearers if protected from frost, but with us the bloom is so early, a week before the peach, that they are generally killed. I have prepared several stocks in pots, and intend to keep them during winter in the cellar, as recommended in your Magazine. The latter are killed about every other year, near the Ohio river, by frost; while on the south shore of Lake Erie, two degrees north of us, they are never or very rarely injured. The peach insect has however made such ravages, that many are discouraged from attempting its culture, although with care it may be grown as well as ever. Our climate, however, has changed very considerably since the early settlement of the country, when the peach grew with the greatest luxuriance, and every tree produced good fruit. They sometimes bore the second year from planting the stone. The winters then were mild, and the seasons not subject to such extremes of heat and cold. The earth seldom froze in the forests, where it was covered with leaves. Now, since so large a portion of the trees are cut away, the summers are hotter and winters colder than formerly; the heat being not so equally distributed, although the mean temperature is about the same.

PLUMS.

The plum grows in the western country in great luxuriance, several varieties being indigenous to the soil. The fruit of some of them is large and fine, especially in the rich prairies in the vicinity of Circleville, Ohio. They are in a manner free from the depredations of the curculio, so ruinous to the cultivated and exotic kinds. The only remedy I have is to shake the trees repeatedly through the day, and catch the fallen insects on a sheet. A considerable crop may also be saved by examining the fruit every day on the trees not too large, and crushing the egg with the thumb nail. The egg, or the young larva, may thus be destroyed at any time within

two or three days after the egg is deposited under the cuticle of the plum. It is a tedious process, but preferable to having no crop at all of the luscious imperial or green gage. I have thought that some liquid compound might be formed of such offensive materials, and thrown with a syringe over the young plums, as to deter them from laying their eggs in them. I hope to try it another year.

THE APPLE.

This most valuable of all fruits, grows in perfection in the valley of the Ohio. The climate and soil both combine to give it all the excellence it is capable of possessing, both in flavor and size. I consider this region the natural climate of the apple, as well as of Indian corn. All the varieties yet cultivated succeed to admiration. Its fruit is one of the staple articles of export in several of the river countries in Ohio. From the choice trees brought out by Israel Putnam, the grandson of the General, as early as the year 1798, many fine varieties have been produced from the seeds. Single apples of the russet, greening, blue pearmain, golden pippin, &c. are often seen to weigh from sixteen to twenty-six ounces. Immense quantities are dried in kilns, prepared for this purpose, and distributed all over the newer western states, as low down as New Orleans, and as high up as Wisconsin. We are now cultivating, in addition to the best varieties of Mr. Cox's day, several of the new ones lately introduced in the eastern states.

FLOWER GARDEN.

In this department, little has yet been done in Ohio, except in some of our larger cities. In new countries, the useful and needful must precede for a long time the ornamental. Nevertheless, a growing taste for horticulture is beginning to be perceived in many of our villages, and by some of our more intelligent farmers. In the older settlements many of the door yards are decorated with rose-bushes, snow-balls and altheas; while the fronts and door-ways are covered with the wide spread branches of the wild *Rosa rubra*, or *multiflora* of the west. The *Bignonia radicans*, native trumpet flower, or the tri-colored fragrant honeysuckle, are also favorites with some of our inhabitants. The deep green foliage of the former is sometimes seen mounting the roofs of our cabins, and thrusting

the vigorous radical fibres of its branches into every crevice of the logs, covering the sides and roof with a profusion of orange colored flowers. It is about ten years since I commenced a flower garden; during which period has been added annually, from the eastern gardens, from ten to twenty dollars' worth of bulbs, shrubs and herbaceous plants.

By assiduous cultivation several of these families have been greatly multiplied, especially the bulbs. About thirty varieties of choice tulips, in May, make a gorgeous display, showing, for many days in succession, from fifteen hundred to two thousand flowers at one time. Of hyacinths, there are about twenty varieties, and several hundred plants; some of these, in April last, showed spikes of flowers, from twelve to fourteen inches high, supporting from twelve to twenty-five flowers, two inches in diameter. Of *Polyanthus narcissus* there are five varieties; the spikes of the white Italian are sometimes a foot and a half high, with panicles of ten or twelve flowers each. Of crocus, six varieties, with many hundred individuals. This splendid little flower, coming as it does when the rest of Flora's train are dormant with the chill of winter, is deserving of far more attention than it has received. Primroses and cowslips, six or eight varieties—crown imperials, four varieties, with stems nearly four feet high: these are best propagated by taking up the bulbs as soon as the tops are dead, and placing them in a box in a damp cellar. Let them remain here, until they throw out their roots freely, which is generally in September; then plant in a very rich sandy loam. The stem of this majestic flowering bulb stands unrivalled in its graceful and beautiful proportions, and, but for its repulsive odor, would have many more admirers than it now has,

LILIES, EIGHT OR TEN VARIETIES.

The *Amaryllis longifolia*, although a Cape bulb, has stood in the open ground unharmed for six or seven winters, requiring only a good coat of leaves, protected from the winds and rain by a flour barrel. The location is near a well, where it receives a plentiful supply of water. This season it has already thrown up six flower stems, more than three feet high, crowned with ten or twelve superb pink colored flowers. Between this and autumn it will produce several additional spikes. *Ornithogalum*, four varieties, one of which is indigenous, producing beautiful pale blue flowers. *Gladiolus*, three varie-

ties—of these the floribundus is the most beautiful: a single bulb this year produced three stems, one of which was four feet high, supporting twelve superb flowers; the others were not quite so tall, producing nine or ten flowers each. This may not be extraordinary, and probably is not, as it is the first year I have cultivated it; but it arrested my attention to behold so prodigious a growth from one small bulb, not more than an inch in diameter. Of roses, there are about forty hardy varieties, with six that require protection in winter. All my monthly roses stand out: by laying them carefully down, and covering securely with straw and boards, they bear the winter very well, although the temperature is below zero, on several mornings, nearly every year. The scarlet and flesh colored varieties of *Pyrus japonicus* are as hardy as an apple, after producing their fruit, and in wet autumns producing a second crop of flowers. Of pæonies, there are seven varieties, three of which are the mountain or tree pæony; they stand the winter equally well with the herbaceous Chinese species. The Hûmei has for several years thrown up stems three feet high, with flowers twenty-one inches in circumference. The stems of the odorata are often four feet high, but the blossoms are much smaller. The orange and lemon are cultivated in tubs, and kept during winter in the sitting-room, while the oleander, Cape myrtle, pomegranate, China tree, hydrangea, &c. are placed in a warm cellar, to which the rays of the sun have access every fair day. I have twice attempted the parlor cultivation of the beautiful camellia; and although they produced well developed flower buds, they always dropped off before expanding.

Of dahlias, there are about twenty-five varieties, several of which are seedlings: they grow in this climate with wonderful luxuriance, and are loaded with flowers of the largest dimensions and brilliant colors. The more vigorous the plant, the finer the flowers.

Quite a number of native flowering plants and shrubs have been introduced into the garden, many of which are fully equal, if not superior, to any of the exotics. I have no greenhouse, to protect my pelargoniums, verbenas, jasamines, and many other tender plants, during the winter, and have to nurse them the best way I can in the house. I propose, however, to build a large tight box, near the front window of the sitting-room, line the bottom with damp moss or tan, and cover it

336 *Cultivation of Camellia Japonica var. Harrisoni.*

with glass. In this the plants will inhale the moist warm air, so necessary to the health and comfort of their flowers and foliage.

Very truly, yours,

S. P. HILDRETH.

Marietta, (Ohio,) August 1, 1841.

ART. III. *Some Remarks upon the cultivation of Camellia japonica var. Harrisonii.* By Dr. J. S. GUNNELL, Washington, D. C.

THE peculiar shy blooming character of *Camellia japonica* var. *Harrisonii* is well known to most cultivators of this splendid family of plants. It is an American seedling, raised near New York, many years since,* and is quite common in all good collections of the camellia; but, notwithstanding this, it is rarely seen in bloom.

I have had several plants of this variety seven years, some of which are now four or five feet high, and in fine growing condition, but I have never had only three flowers, all of which were on one of the plants; two opened last winter, and one the winter before last. None of the others have opened a bloom. I therefore came to the determination, last spring, to inarch the plants with other more free blooming and desirable varieties.

This variety is later than others in commencing its spring growth, and, consequently, the inarching was not made until early in June. At that time, the new wood was about *half grown*, or had made about half its length: the inarchings were made at that part of the stem where the branches divide, and as the stock was somewhat larger than the scion, it was necessary to bind the matting tighter than for smaller stocks. After the operation was finished, very little notice was taken of the plants for some time. Judge, then, of my astonish-

* As long ago, we believe, as 1826 or 1828. We visited the collection of Mr. Harrison, in 1835, (see our Vol. III., p. 125,) and at that time we saw large plants.—*Ed.*

ment, when I came to inspect the plants more particularly, a few weeks after, to find them as *full of flower buds* as I could wish, some of the branches having two buds each.

The only reason I can offer for this unusual quantity of buds, is, that the binding of the plants, in that stage of their growth when they were inarched, checked the flow of the sap, (the variety being a rapid grower,) and consequently induced the formation of flower buds. So far as I have had any information, ordinary treatment has not been attended with any success, and, although I may be in error as to the cause of the budding of my plants, still I think the information worth communicating in your pages, that others, who have not been able to flower this variety, may try the experiment. It is one of the most beautiful kinds. The flower is small, but as full as the double white, and if any method can be suggested, which will enable cultivators to bloom it freely, it will be a great desideratum.

Respectfully yours,

J. S. GUNNELL.

Washington, D. C., August, 1841.

Correction.—In my communication on the cultivation of the camellia in the parlor, p. 215, twenty-seventh line from the top, in speaking of the syringing of the plants I say "about sunset." I should rather have said "about sunset, or at bed time, to suit the convenience of the family, as they could not sit in a damp room."

I would also remark, in addition to what I have before stated, that syringing over the foliage is not absolutely necessary to the success of the plants, as I have seen camellias flourish well in parlors where they were never syringed at all over the foliage.—J. S. G.

ART. IV. *Floricultural and Botanical Notices of new Plants figured in foreign periodicals; with Remarks on those recently introduced to, or originated in, American gardens, and additional information upon plants already in cultivation.*

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing from six to eight plates, with additional miscellaneous information, relative to new Plants. In monthly numbers; 3s. plain, 3s. 6d. colored.

Paxton's Magazine of Botany, and Register of Flowering Plants. Each number containing four colored plates. Monthly. 2s. 6d. each. Edited by J. Paxton, gardener to the Duke of Devonshire.

The Gardener's Gazette, and Weekly Journal of Science and Literature. Weekly; price 6d. each.

The Gardener's Chronicle, a stamped newspaper of Rural Economy and General News. Edited by Prof. Lindley. Weekly. Price 6d. each.

FOR a long period we have been without the regular receipt of all our English periodicals, but having now made such arrangements as will, in future, place them in our hands at an early day, we shall commence with our notices in our usual style; knowing that such notices are not only valuable to all our botanical and floricultural readers, but are sought after by all who take an interest in the cultivation of plants. In connection with the notices of the subjects figured in these publications, we shall also, under the several orders, introduce such plants belonging to those orders as may have been originated in our gardens, or may have flowered for the first time, with remarks upon their propagation, cultivation, &c.

Berberidaceæ.

BERBERIS

coriaria Royle The Tanner's Berberry. A half hardy (?) shrub, growing five or six feet high; with yellow flowers, appearing in June; propagated by seeds or layers; a native of Nepal; introduced in 1835. *Bot. Reg.*, 1841. 46.

All the Nepal berberries are fine hardy shrubs in the climate of England, and we do not doubt they might be so here, particularly south of New York. Few of them, however, have ever been introduced. The *B. coriaria* has somewhat the appearance of our common berberry, but the flowers are considerably larger, and the foliage much more beautiful. The racemes of flowers are axillary and pendulous, and produced in considerable numbers. In the garden it is a robust shrub, quite hardy, flowering in June. It is easily increased by seeds, which should be sown as soon as ripe. Seeds were received by the London Horticultural Society, from Dr. Royle, in 1835, from whence the plants were raised. (*Bot. Reg.*, July.)

Ternstromiaceæ.

CAMELLIA

There seems to be no limit to seedling camellias, and, what

is very remarkable, there seems to be scarcely any limit to even very fine varieties. A few years ago, what is now deemed an ordinary camellia was considered a great acquisition as a seedling; but so improved have the flowers become, that only those of extraordinary elegance are considered as worthy of a name. We have already noticed the production of several new ones, which are said to be of great merit, and in our late tour to the south we have heard of several more, which we shall have occasion to notice at another time. For the present, we offer the following description of a seedling raised by our friend and correspondent, Dr. J. S. Gunnell, of Washington. His communication has been on hand some time, awaiting a favorable opportunity for insertion.

"Dear Sir,—I have had but few of my seedling camellias to bloom the past winter, but one of those that did flower will repay for many failures: it is a double white one, which I propose to call *Camellia* var. *Mrs. Gunnell*, or *Camellia* var. *Gunnellæ*, so as to distinguish it from the white camellia raised in Germany by a Mr. Gunnell, which he calls *Camellia Gunnellii*, which is not so double to the centre as the one I have raised, and the flower interspersed with anthers.

Camellia Mrs. Gunnell, or *Gunnellæ*, is a seedling of the *old striped* (or *Pompone*;) its foliage is very smooth and glossy, and larger than the foliage of the *old variegata*, though very much like it, a very free grower; its blooming buds, petals and flowers are of the shape of the *Camellia* var. *imbricata*, but the flower is of the purest white, and double to the centre, having *ninety* petals, with rose shaped edges; the calyx is green and short, which will make it an easy bloomer, and allow it to be forced into flower: this I consider the most magnificent of the white camellias that I have seen in bloom.

My camellia *Old Virginia* bloomed again last winter, and the blooming bud and calyx partook more of the shape and color of the *Hume's blush*, and the petals numbered eighty-four, and were less of the rose-edged shape than heretofore described.—*Respectfully yours, J. S. Gunnell, Washington, D. C., July 10, 1841.*"

Onagradia.

FUCHSIA

cordifolia *Hartwig* The heart-leaved fuchsia.

"Among the many novelties introduced by the Horticultural Society, is another new fuchsia, which, although less

beautiful than *fulgens* and *corymbiflora*, is a very striking plant, its habit being better than either. The leaves are broad, and deep green, whilst the stems are red, and the pendulous flowers are fully two inches long, produced singly, with the tube scarlet and the tip of the calyx and petals greenish yellow." It will probably be a good species for crossing. (*B. R. C.*, No. 117, 1841.)

Fuchsia corymbiflora, and *F. Standishii*, both fine kinds, we lately saw in flower in Mr. Buist's collection, in Philadelphia. Each of them should be found in every good collection.

F. fulgens does finely, turned out into the open ground, where it displays flowers in greater profusion, and to better advantage.

Rosaceæ.

POTENTILLA

insignis *Royle* Specious cinquefoil. A hardy perennial, growing two feet high; with yellow flowers, appearing from June to September; a native of East India; propagated from seeds or division of the roots. *Bot. Reg.*, 1841. 37.

A large and showy species of the potentilla, the seeds of which were received by the London Horticultural Society, from the directors of the East India Co. The flowers are yellow, of good size, and the habit of the plant erect. It requires the same treatment as the common *P. atrosanguinea*. Dr. Lindley thinks it "may be the means of producing some hybrids with either *P. atrosanguinea* or *P. nepalensis*," which he expects, "will some day rival the hybrid *calceolarias*, now so common." (*Bot. Reg.*, July.)

PHILADELPHUS

mexicanus *Hartwig*

"A new hardy shrub, sent from Mexico." Flowers when a foot high; grows upright, with slender branches. "The flowers, which are large, and cream-colored, are terminal, solitary, and delightfully fragrant." From its dwarf habit, it will probably force well. (*B. R. C.*, No. 118. 1841.)

Leguminosæ.

CHOROZEMA

spectabile *Lind.* Showy chorozema. A green-house twiner; growing six or eight feet high; with orange colored flowers; appearing in winter; it grows freely from seed, and thrives in peat and leaf mould, with loam and sand. *Bot. Reg.*, 1841. 45.

All the chorozemas are pretty plants, particularly *C. Henchmânii*. The present subject is one of great beauty, "in consequence of its long drooping clusters of orange col-

ored flowers, which appear in profusion in the months of winter." Each raceme contains from ten to thirteen flowers.

It is a pretty pot plant to train to a neat trellis, or it may be put out into a light border, when it grows and flowers in great beauty. Care should be taken to guard against the red spider, which is apt to infest its leaves. (*Bot. Reg.*; Aug.)

A very showy bean has been raised from seed received from the Exploring Expedition. We saw it in flower at Baltimore and Washington, and deem it a very fine acquisition to our climbing plants. It will be further noticed when speaking of the places where we saw it.

Oxalidaceæ.

Oxalis

fruticosa Aug. St. Hilariæ The shrubby wood sorrel. A green-house shrub, growing three or four (?) feet high, with yellow flowers, appearing in April or May, (?); a native of Rio Janeiro; propagated by cuttings and seeds; cultivated in peat, leaf mould, and loam. *Bot. Reg.*, 1841. 41.

"Nothing," says Dr. Lindley, "in the vegetable kingdom, is more curious than the way in which plants are enabled to alter one organ, so as to perform the office of another, when that other is from any cause destroyed, or undeveloped." Of this the cactus tribe, where the stem performs the office of leaves, is an instance. The species of sorrel now named, is another illustration of this singular property. It is a shrub, with apparent lanceolate leaves! entirely unlike the trefoil foliage of the pretty little plants which characterize the oxalis family. "Upon looking, however, with care among the branches, the triple leaf of the wood sorrel is detected at the ends of some of those blades, and so we learn that they too are flattened leaf-stalks, made into substitutes for the leaves which drop off."

The plate represents a terminal branch, thickly clothed with the flattened leaves, with numerous axillary clusters of flowers of a bright yellow. The plants should be grown in sand, leaf mould, and loam, in the green-house. (*Bot. Reg.*, Aug.)

Now is the season to plant oxalises for early flowering; and a second planting may take place in October. *O. Bôwiei*, *versicolor*, *cérnua*, and *rosàcæa*, are each fine sorts.

Violàcæ.

SCHWEIGGERIA (after Prof. Schweigger, one of the authors of a *Flora* of Erlangen,) *Spreng.*

pauciflora Martius Few-flowered Prong Violet. A hot-house shrub, growing three or four feet high, with white flowers; appearing in (?); a native of Brazil. *Bot. Reg.*, 1841. 40.

"Very nearly violets; but differ in having a calyx whose dimensions are extremely unequal; three being large, and heart-shaped at the base, but not decurrent, the other two being small, and enclosed within the others. This species forms a small shrub in the mountainous places and woods of Brazil. The flowers are small and scattered; the branches erect, with oblong or obovate leaves. It was introduced by Messrs. Loddiges, in whose collection it flowered. (*Bot. Reg.*, July.)

Convolvulaceæ.

IPOMÆA

batatoides Benth. The male Jalap. A green-house twiner, growing several feet high; with rich deep crimson flowers; appearing in spring; a native of Mexico; propagated by cuttings; grown in loam, peat, and leaf mould, with a little sand. *Bot. Reg.*, 1841. 36.

Within a few years, several very showy ipomæas have been introduced. The *I. Horsfalliæ* was considered remarkably splendid, but it is now to be eclipsed by others, particularly the present subject, which is said to be so beautiful "that a rival to it can hardly be found in this most lovely race." The stems do not ramble so much as other species, nor are the leaves so abundant as to overshadow and conceal the flowers; the latter stand forward from the foliage, and fully expand in the early part of the day: at this time, their brilliancy is beyond representation. It is easily managed. The roots are tuberous, and should be kept warm and dry in winter: as soon as they begin to start they should be watered cautiously, but freely afterwards. Leaf mould, peat, and loam, with a little sand, suit it, and it would probably, in our climate, flourish well and bloom beautifully if turned out in the summer in a warm border. This is one of the species which supply the jalap gatherers of Mexico, and was sent to the London Horticultural Society by M. Hartwig. (*Bot. Reg.*, July.)

CONVOLVULUS

scoparius Hort. Kew. Canary Rose-wood. A green-house shrub; growing three feet high, with white flowers; appearing in September and October; a native of the Canary Isles; propagated by seeds. *Bot. Reg.*, 1841. 43.

Quite unlike a convolvulus: the plate represents the branches clothed with axillary cymes of small white flowers. There does indeed appear to be some doubt about its being a convolvulus, but Dr. Lindley leaves it there for various reasons, one of which is that he cannot make up his mind where it can be surely stationed.

This is the plant which yields the oil of rhodium, from whence its name of rose-wood. This oil is yielded by distillation, and is employed by perfumers for adulterating oil of roses. The wood, powdered, forms an agreeable snuff, and, when burnt, diffuses a delightful fragrance. (*Bot. Reg.*, July.)

Labidtea.

SA'LZIA

tubifera Benth. Tube flowered *Salvia*. A half shrubby green-house plant, growing three or four feet high: with red flowers, appearing in September or October; a native of Mexico; increased by cuttings. *Bot. Reg.*, 1841. 44.

This is one of the acquisitions of Mr. Hartwig in Mexico, the seeds of which he sent to the Horticultural Society. It forms a bush three feet high, much branched, well covered with leaves, and every twig terminated with a raceme of its slender purple flowers, so disposed as to form a drooping or ear-ring ornament. The color of the flowers is similar to *Justicia elegans*. It seems to be a free bloomer, expanding a great number of flowers at once, in the manner of the old and splendid *S. cardinalis*: the flowers are much smaller, but, to make up for this, they are much thicker, forming a dense spike. Cultivated in the same manner of the old species. (*Bot. Reg.*, Aug.)

bians Benth. Gaping Sage. A hardy herbaceous plant, growing a foot high; with variegated flowers; appearing in May and June; a native of Cashmere; introduced in 1839; propagated by seeds and division of the roots. *Bot. Reg.*, 1841. 39.

"One of the gayest of our perennials," throwing up spikes of blue and white flowers a foot long, and very showy, from the striking contrast between the two colors. It is increased by dividing the root, in spring. (*Bot. Reg.*, July.)

Salvia Tendrei is now throwing up a second spike of its pretty flowers, somewhat resembling the above: it flowered finely in May. It is a perfectly hardy perennial plant.

Salvia patens we saw in bloom in several gardens, during our late tour: its flowers are of a most brilliant blue, but the scanty manner in which they are produced detracts much from its merit as a showy border flower.

Scutellaria splendens is the name of a new plant which has flowered in the Berlin Botanic Garden. It is a fine species, producing racemes of tubular scarlet flowers an inch long, somewhat resembling *Gardouia Hookerii*. It is a perennial, growing a foot and a half high. (*B. R. C.*, 139, Aug.)

REVIEWS.

ART. I. *Organic Chemistry, in its application to Agriculture and Physiology.* By JUSTUS LIEBIG, M. D., F. R. S., &c. &c., Professor of Chemistry in the University of Giessen. Edited from the manuscript of the author, by Lyon Playfair, M. D. First American edition, with an Introduction, Notes, and Appendix, by John W. Webster, M. D., Prof. of Chemistry in Harvard University. 1 vol. 12mo., pp. 435. Cambridge, Mass, 1841.

THE appearance of this work, in an American form, is most felicitous at a time when the agricultural public are awakening to the importance of a greater and more studious attention to other modes of enriching the soil, than those in common vogue. Terms of chemical science, expressive of analytical experiments in matter, are now as familiar to many a farmer, as the names of his implements. Through the efforts of Hitchcock, Dana, and Jackson, humus and geine, crenic and apocrenic acids, the action of the more elegant mineral manures, and their less laborious application, with their remarkable results, are fast accommodating themselves to ordinary perceptions, and are being better understood than older theories of fertilizing the ground. The *modus operandi* of these older manures, too, is investigated, and, in the presence of a few salts, or in the combination of a few acids, the secrets of nature are displayed.

Prof. Webster is to be cordially thanked for this welcome specimen of his zeal and interest in behalf of American agriculture. Generally speaking, the works of foreign countries, or the varied subjects of science, are the rather to be avoided than sought. Extensive and fatal errors have doubtless been committed by a want of proper discrimination between the culture of different and wide apart territories. We have been too prone to borrow from abroad the experience, which does not prove, in the nature of the case, equally efficacious at home. The climate of England, so peculiar, may be most favorable to English culture, but that culture would be sadly improper in our own. The sunny hills of southern France may produce the luxuriant grape, yet a similar latitude in our

own, might disappoint, under a same culture, our vine-dressers. With a temperature of climate so variable and changing as our own, the most ingenious foreign expedients might prove wholly futile in producing, with us, similar results. The extreme heat of the summer just past, and the late severe drought in many parts of New England, seem to be only equalled by the tropical fervor of southern Africa. We need, then, our own experiments and our own agriculture. The old-fashioned farmer, with his quaint notions derived from the experience of his ancestors, steady and successful culturists, is often more than half right in scorning what he calls book-farming, not because books are not good things, but because *books are made*, not written; and are manufactured, too, not unfrequently, from some useless foreign article.

These, and similar remarks, however, do not apply to such works as the one before us. The application of chemistry to agriculture is of a modern date. It necessarily affects the materials of soil, and its efforts are tending to a nice analytical investigation. Natural soils, therefore, be they peat, or granitic, or limestone, sand, or gravel, are submitted to a process of artificial disintegration, previous to the application of scientific results. The errors of a wrong application of manures, especially mineral, to soils unfitted to them, are thus avoided; and those bodies which will develop their several greatest energies in the production of crops, are known, and can be used with success. By the perusal of such works as this, the farmer need no longer be groping in the dark, and liable to mistakes, nor would the not unnatural odium of farming by the book, be longer existent.

The vast importance of this application of science to agriculture, has been long known, and highly recommended. The results of such experiments must, however, be slow in their acquisition, and, like all other branches of human knowledge, liable to error. A degree of caution is therefore to be used, in taking too implicitly all that is affirmed. So prone is human nature, to see, in a favorite theory, all that it anticipates, that it becomes important to hail such efforts as a series of progress towards a good end, rather than as the end itself. The critical student, in his confined laboratory, may be confident in his experiments, and certain of their accuracy, but it is for the agriculturist to prove them, on the larger scale of his own farm. Both of these operators may be thus eminent-

ly useful to each other, and, by mutual experiment and experience, the most happy results accrue.

Dr. Liebig remarks, in his preface,

Since the time of the immortal author of the "Agricultural Chemistry," no chemist has occupied himself in studying the applications of chemical principles to the growth of vegetables, and to organic processes. I have endeavored to follow the path marked out by Sir Humphrey Davy, who based his conclusions only on that which was capable of inquiry and proof. This is the path of true philosophical inquiry, which promises to lead us to truth,—the proper object of our research.

In order to facilitate a more perfect understanding of the work, an introduction, consisting of a simple treatise on the first principles of chemistry, is added by the American editor. This, we are informed, was also selected from a work of Prof. Liebig.

Chapter I. introduces the reader to the object of the work.

The object of organic chemistry is to discover the chemical conditions which are essential to the life and perfect development of animals and vegetables, and, generally, to investigate all those processes of organic nature which are due to the operation of chemical laws.

The continued existence of all living beings is dependent on the reception by them of certain substances, which are applied to the nutrition of their frame. An inquiry, therefore, into the conditions on which the life and growth of living beings depend, involves the study of those substances which serve them as nutriment, as well as the investigation of the sources whence these substances are derived, and the changes which they undergo in process of assimilation.

The primary source whence man and animals derive the means of their growth and support is the vegetable kingdom.

Plants, on the other hand, find new nutritive material only in inorganic substances.

The purport of this work is to elucidate the chemical processes engaged in the nutrition of vegetables.

It will be devoted to the examination of the matters which supply the nutriment of plants, and of the changes which these matters undergo in the living organism. The chemical compounds which afford to plants their principal constituents, viz. carbon and nitrogen, will come under consideration, as well as the relations in which the vital functions of vegetables stand to those of the animal economy and to other phenomena of nature.

To insure the growth of plants

Requires the presence, first, of substances containing carbon and nitrogen, and capable of yielding these elements to the growing organism; secondly, of water and its elements; and lastly, of a soil to furnish the inorganic matters which are likewise essential to vegetable life.

Chapter II. treats of the assimilation of carbon, in a full and interesting manner, and details many facts of surprising beauty, relative to physiological topics. As the subject of carbon, in reference to its adaptation to horticultural purposes, is now under favorable notice among our florists and amateurs, we select as follows:—

How does it happen, it may be asked, that the absorption of carbon from the atmosphere by plants is doubted by all botanists and vegetable physiologists, and that by the greater number the purification of the air by means of them is wholly denied?

These doubts have arisen from the action of plants on the air in the absence of light, that is, during the night.

The experiments of *Ingenhous* were in a great measure the cause of this uncertainty of opinion, regarding the influence of plants in purifying the air. His observation, that green plants emit carbonic acid in the dark, led *De Saussure* and *Grischow* to new investigations, by which they ascertained that under such conditions plants do really absorb oxygen, and emit carbonic acid; but that the whole volume of air undergoes diminution at the same time. From the latter fact it follows, that the quantity of oxygen gas absorbed is greater, than the volume of carbonic acid separated; for if this were not the case, no diminution could occur. These facts cannot be doubted, but the views based on them have been so false, that nothing, except the total want of observation, and the utmost ignorance of the chemical relations of plants to the atmosphere, can account for their adoption.

It is known, that nitrogen, hydrogen, and a number of other gases, exercise a peculiar, and, in general, an injurious influence upon living plants. Is it then, probable, that oxygen, one of the most energetic agents in nature, should remain without influence on plants when one of their peculiar processes of assimilation has ceased?

It is true, that the decomposition of carbonic acid is arrested by absence of light. But then, namely, at night, a true chemical process commences, in consequence of the action of the oxygen in the air, upon the organic substances composing the leaves, blossoms, and fruit. This process is not at all connected with the life of the vegetable organism, because it goes on in a dead plant exactly as in a living one.

The substances composing the leaves of different plants being known, it is a matter of the greatest ease and certainty, to calculate which of them, during life, should absorb most oxygen by chemical action, when the influence of light is withdrawn.

The leaves and green parts of all plants, containing volatile oils or volatile constituents in general, which change into resin by the absorption of oxygen, should absorb more than other parts which are free from such substances. These leaves, also, which contain either the constituents of nut-galls, or compounds, in which nitrogen is present, ought to absorb more oxygen than those which do not contain such matters. The correctness of these inferences has been distinctly proved by the observations of *De Saussure*; for, whilst the

tasteless leaves of the *Agave Americana* absorb only 0.3 of their volume of oxygen, in the dark, during 24 hours, the leaves of the *Pinus Abies*, which contain volatile and resinous oils, absorb 10 times, those of the *Quercus Robur* containing tannic acid 14 times, and the balmy leaves of the *Populus alba* 21 times that quantity. This chemical action is shown, very plainly, also in the leaves of the *Cotyledon calycinum*, the *Cacalia ficoides* and others; for they are sour like sorrel in the morning, tasteless at noon, and bitter in the evening. The formation of acids is effected during the night, by a true process of oxidation: these are deprived of their acid properties during the day and evening, and are changed, by separation of a part of their oxygen, into compounds containing oxygen and hydrogen, either in the same proportions as in water, or even with an excess of hydrogen, which is the composition of all tasteless and bitter substances.

The opinion is not new that the carbonic acid of the air serves for the nutriment of plants, and that its carbon is assimilated by them; it has been admitted, defended, and argued for, by the soundest and most intelligent natural philosophers, namely, by *Priestley*, *Sennebier*, *De Saussure*, and even by *Ingenhous* himself.

The question whether carbonic acid is the food of plants or not, has been made the subject of experiments with perfect zeal and good faith; the results have been opposed to that view. But how was the inquiry instituted?

The seeds of balsamines, beans, cresses, and gourds, were sown in pure Carrara marble, and sprinkled with water containing carbonic acid. The seeds sprang, but the plants did not attain to the development of the third small leaf. In other cases, they allowed the water to penetrate the marble from below, yet, in spite of this, they died. It is worthy of observation, that they lived longer with pure distilled water than with that impregnated with carbonic acid; but still, in this case also, they eventually perished. Other experimenters sowed seeds of plants in flowers of sulphur and sulphate of baryta, and tried to nourish them with carbonic acid, but without success.

Such experiments have been considered as positive proofs, that carbonic acid will not nourish plants; but the manner in which they were instituted is opposed to all rules of philosophical inquiry, and to all the laws of chemistry.

Again, in chapter III., on this same subject, the introsusception of carbonic acid as a nutriment, takes place where, instead of *humus*, (a substance formerly supposed to act directly as the food of plants,) charcoal is used, we learn that

Plants thrive in powdered charcoal, and may be brought to blossom and bear fruit if exposed to the influence of the rain and the atmosphere; the charcoal may be previously heated to redness. Charcoal is the most "indifferent" and most unchangeable substance known; it may be kept for centuries without change, and is therefore not subject to decomposition. The only substances which it can yield to plants are some salts, which it contains, amongst which is silicate of potash. It is known, however, to possess the

power of condensing gases within its pores, and particularly carbonic acid. And it is by virtue of this power that the roots of plants are supplied in charcoal exactly as in humus, with an atmosphere of carbonic acid and air, which is renewed as quickly as it is abstracted.

In charcoal powder, which had been used for this purpose by *Lukas* for several years, *Buchner* found a brown substance soluble in alkalis. This substance was evidently due to the secretions from the roots of the plants which grew in it.

A plant placed in a closed vessel in which the air, and therefore the carbonic acid, cannot be renewed, dies exactly as it would do in the vacuum of an air-pump, or in an atmosphere of nitrogen or carbonic acid, even though its roots be fixed in the richest mould.

In confirmation of this, the American editor appends the following, from his own experience:—

A few years since I had an opportunity of observing a striking instance of the effect of carbonic acid upon vegetation in the volcanic island of St. Michael (Azores.) The gas issued from a fissure in the base of a hill of trachyte and tuffa from which a level field of some acres extended. This field, at the time of my visit, was in part covered with Indian corn. The corn at the distance of ten or fifteen yards from the fissure, was nearly full grown, and of the usual height, but the height regularly diminished until within five or six feet of the hill, where it attained but a few inches. This effect was owing to the great specific gravity of the carbonic acid, and its spreading upon the ground, but as the distance increased, and it became more and more mingled with atmospheric air, it had produced less and less effect.

The fertilizing properties of the atmosphere, and especially of rain, are thus ingeniously proved, from the presence of ammonia, a well known stimulant in vegetation, and the product of fermenting animal manures, which modern farmers have learned to be too precious to waste its odors from carelessly constructed barns.

If a pound of rain water contain only one fourth of a grain of ammonia, then a field of forty thousand square feet must receive annually upwards of eighty pounds of ammonia, or sixty-five pounds of nitrogen; for, by the observations of *Schubler*, which were formerly alluded to, about seven hundred thousand pounds of rain fall over this surface in four months, and consequently the annual fall must be two million five hundred thousand pounds. This is much more nitrogen than is contained in the form of vegetable albumen and gluten, in two thousand six hundred and fifty pounds of wood, two thousand eight hundred pounds of hay, or two hundred cwt. of beet root, which are the yearly produce of such a field, but it is less than the straw, roots, and grain of corn which might grow on the same surface, would contain.

Experiments, made in this laboratory (Giessen) with the greatest care and exactness, have placed the presence of ammonia in rain-

water beyond all doubt. It has hitherto escaped observation, because no person thought of searching for it. All the rain-water employed in this inquiry was collected six hundred paces southwest of Giessen, whilst the wind was blowing in the direction of the town. When several hundred pounds of it were distilled in a copper still, and the first two or three pounds evaporated with the addition of a little muriatic acid, a very distinct crystallization of sal-ammoniac was obtained: the crystals had always a brown or yellow color.

Ammonia may likewise be always detected in snow water. Crystals of sal-ammoniac were obtained by evaporating in a vessel with muriatic acid several pounds of snow, which were gathered from the surface of the ground in March, when the snow had a depth of ten inches. Ammonia was set free from these crystals by the addition of hydrate of lime. The inferior layers of snow, which rested upon the ground, contained a quantity decidedly greater than those which formed the surface.

It is worthy of observation, that the ammonia contained in rain and snow water, possessed an offensive smell of perspiration and animal excrements,—a fact which leaves no doubt respecting its origin.

Thus the old homely adage, that the late snows of spring are the poor man's manure, may have had more meaning than we had "dreamed in our philosophy," and seems to have been based on strictly scientific truths.

The facility with which plants take up foreign substances into their systems, was exhibited by Marcet, in producing their death by means of mineral poisons, but we find a more innocent and amusing experiment in the following, which we quote as a matter of mere curiosity;—

When the soil, in which a white hyacinth is growing in the state of blossom, is sprinkled with the juice of the *Phytolacca decandra*, the white blossoms assume, in one or two hours, a red color, which again disappears after a few days under the influence of sunshine, and they become white and colorless as before. The juice in this case evidently enters into all parts of the plant, without being at all changed in its chemical nature, or without its presence being apparently either necessary or injurious. But this condition is not permanent, and when the blossoms have become again colorless, none of the coloring matter remains; and if it should occur, that any of its elements were adapted for the purposes of nutrition of the plant, then these alone would be retained, whilst the rest would be excreted in an altered form by the roots.

The presence of the alkalies in natural soils, imparting thereby, according to their quantity, a proportionate fertility, is thus made the basis of a deduction regarding the native growth of forests on different lands. This, we presume,

however, has nothing to do with the geographical distribution of plants, but is a theory to account for a certain susceptibility of particular trees and plants to particular soils.

How does it happen that wheat does not flourish on a sandy soil, and that a calcareous soil is also unsuitable for its growth, unless it be mixed with a considerable quantity of clay? It is because these soils do not contain alkalis in sufficient quantity, the growth of wheat being arrested by this circumstance, even should all other substances be presented in abundance.

It is not mere accident that only trees of the fir tribe grow on the sandstone and limestone of the Carpathian mountains and the Jura, whilst we find on soils of gneiss, mica-slate, and granite in Bavaria, of clinkstone on the Rhone, of basalt in Vogelsberge, and of clay-slate on the Rhine and Eifel, the finest forests of other trees which cannot be produced on the sandy or calcareous soils upon which pines thrive. It is explained by the fact, that trees, the leaves of which are renewed annually, require for their leaves six to ten times more alkalis than the fir-tree or pine, and hence, when they are placed in soils in which alkalis are contained in very small quantity, do not attain maturity. When we see such trees growing on a sandy or calcareous soil,—the red beech, the service-tree, and the wild-cherry, for example, thriving luxuriantly on limestone, we may be assured that alkalis are present in the soil, for they are necessary to their existence. Can we, then, regard it as remarkable, that such trees should thrive in America, on those spots on which forests of pines which have grown and collected alkalis for centuries, have been burnt, and to which the alkalis are thus at once restored; or that the *Spartium scoparium*, *Erysimum latifolium*, *Blitum capitatum*, *Senecio viscosus*, plants remarkable for the quantity of alkalis contained in their ashes, should grow with the greatest luxuriance on the localities of conflagrations.

Wheat will not grow on a soil which has produced wormwood, and, *vice versa*, wormwood does not thrive where wheat has grown, because they are mutually prejudicial by appropriating the alkalis of the soil.

In chapter VIII. we are presented with the philosophical views of interchange of crops, and of manure. From this, we briefly gather, that by rotation of crops, certain alkalis and other principles are restored to the soil, of which it had been deprived by the previous culture. This is a different process from the one effected by the fallow crop system, as in that,

The land is exposed to the progressive disintegration by means of the influence of the atmosphere, for the purpose of rendering a certain quantity of alkalis capable of being appropriated by plants.

Now, it is evident, that the careful tilling of fallow land must increase and accelerate this disintegration. For the purpose of agriculture, it is quite indifferent, whether the land is covered with

weeds, or with a plant which does not abstract the potash enclosed in it. Now many plants in the family of the *leguminosæ*, are remarkable on account of the small quantity of alkalies or salts in general, which they contain; the *Vicia faba* (Windsor bean,) for example, contains no free alkalies, and not one per cent. of the phosphates of lime and magnesia. (*Einhof.*) The bean of the *Phaseolus Vulgaris* (Kidney bean) contains only traces of salts. (*Braconnot.*) The stem of the *Medicago sativa* (Lucerne) contains only 0.83 per cent., that of the *Ervum lens* (Lentil) only 0.57 of phosphate of lime with albumen. (*Crome.*) Buck-wheat dried in the sun yields only 0.681 per cent. of ashes, of which 0.09 parts are soluble salts. (*Zenneck.*) These plants belong to those which are termed fallow-crops, and the cause wherefore they do not exercise any injurious influence on corn which is cultivated immediately after them is, that they do not extract the alkalies of the soil, and only a very small quantity of phosphates.

The process of manure is to replace in a soil all those substances of which it has been deprived. Of animal manures, such as the fæces or excrements, the quantity of nutritive substances varies according to the habits and food of the animal. The comparative value of each of these have been long known to agriculturists; while their application has been made a matter of great interest among those people who depend mostly on the products of the soil for support. Thus, in China, whose agriculture presents a most surprising instance of ingenuity and perseverance, with exuberant success, the most careful and painstaking assiduity is employed in preserving every such article of fertilizing power. Yet, important as these substances seem, and as universal as this application is, it is evident, from chemical analysis and experiment, that other substances, containing their essential constituents, can be substituted.

In Flanders, the yearly loss of the necessary matters in the soil is completely restored by covering the fields with ashes of wood or bones, which may or may not have been lixiviated, and of which the greatest part consists of phosphates of lime and magnesia. The great importance of manuring with ashes has been long recognised by agriculturists as the result of experience. So great a value, indeed, is attached to this material in the vicinity of Marburg, and in the Wetterau, that it is transported as a manure from the distance of eighteen or twenty-four miles.

Bone manure possesses a still greater importance in this respect. The primary sources from which the bones of animals are derived are the hay, straw, or other substances which they take as food. Now if we admit that bones contain fifty-five per cent. of the phosphates of lime and magnesia (*Berzelius.*) and that hay contains as much of them as wheat-straw, it will follow that eight pounds of

bones contain as much phosphate of lime as one thousand pounds of hay or wheat-straw, and two pounds of it as much as one thousand pounds of the grain of wheat or oats. These numbers express pretty exactly the quantity of phosphates which a soil yields annually on the growth of hay and corn. Now the manure of an acre of land with forty pounds of bone dust is sufficient to supply three crops of wheat, clover, potatoes, turnips, &c. with phosphates. But the form in which they are restored to a soil does not appear to be a matter of indifference. For the more finely the bones are reduced to powder, and the more intimately they are mixed with a soil, the more easily are they assimilated. The most easy and practical mode of effecting their division is to pour over the bones, in a state of fine powder, half of their weight of sulphuric acid diluted with three or four parts of water, and after they have been digested for some time, to add one hundred parts of water, and sprinkle this mixture over the field before the plough. In a few seconds, the free acids unite with the bases contained in the earth, and a neutral salt is formed in a very fine state of division. Experiments instituted on a soil formed from *grauwacke*, for the purpose of ascertaining the action of manure thus prepared, have distinctly shown that neither corn, nor kitchen-garden plants, suffer injurious effects in consequence, but that on the contrary they thrive with much more vigor.

In the manufactories of glue, many hundred tons of a solution of phosphates in muriatic acid are yearly thrown away as being useless. It would be important to examine whether this solution might not be substituted for the bones. The free acid would combine with the alkalis in the soil, especially with the lime, and a soluble salt would thus be produced, which is known to possess a favorable action upon the growth of plants. This salt, muriate of lime (or chloride of calcium,) is one of those compounds which attracts water from the atmosphere with great avidity, and might supply the place of gypsum in decomposing carbonate of ammonia, with the formation of sal-ammoniac and carbonate of lime. A solution of bones in muriatic acid placed on land in autumn or in winter would, therefore, not only restore a necessary constituent of the soil, and attract moisture to it, but would also give it the power to retain all the ammonia which fell upon it dissolved in the rain during the period of six months.

The ashes of brown coal and peat often contain silicate of potash, so that it is evident that these might completely replace one of the principal constituents of the dung of the cow and horse, and they contain also some phosphates. Indeed, they are much esteemed in the Wetterau as manure for meadows and moist land.

It should, in justice, be remarked, that the author does not depreciate the immense value of animal manures; and, from subsequent remarks, we should infer that the urates and pou-drettes of our manufactories were likely to effect an important change in the features of tillage, founded, in their preparation, on the more elegant application of the most stimulating manures to culture.

As the topics of agricultural pursuits are more in accord-

ance with the purpose of this Magazine, we shall omit a detailed notice of Part II. of the work before us, which treats in eleven chapters, of the chemical processes of fermentation, decay, and putrefaction, ingeniously illustrated, and worthy the attention of the general reader. An appendix of twenty-three pages, prepared by Prof. Webster, contains many curious experiments, which elucidate the text. Some of these, such as the "action of charcoal from wood on vegetation, in promoting remarkable and thrifty growth in plants, and in affording facilities in striking or rooting cuttings of plants, hitherto difficult to propagate," are familiar to the floricultural public. The application of geine to vegetables is under experiment in several gardens, within our knowledge, and, so far, with the promise, we are assured, of considerable success. Of the nature and application of this, we have the views of Dr. S. L. Dana, and Dr. C. T. Jackson, in full.

In consequence, (says Professor Webster,) of the difference of opinion in regard to the substance which has been called geine, and which has been made public in the Agricultural Reports and Scientific Journals, it was deemed desirable, and due to the advocates of opposite views, to proffer to them the opportunity of appending to this volume such remarks as they might be desirous of presenting in addition to, or in support of, what they have already given to the public. From the replies to the letters addressed to the gentlemen who have advocated the different views, the following extracts are given, together with an extract from the forthcoming *Final Report on the Economical Geology* of this State, for which I am indebted to the politeness of its distinguished author, Professor Hitchcock, of Amherst. It will be obvious that Liebig is conceived to have taken but a limited view of the action of geine.

In conclusion, we recommend the work to the agriculturist and to the horticulturist—to the amateur florist, and to the curious student into the mysteries of organic life,—assured that they will find matter of interest and of profit in their several tastes and pursuits.

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ART. II. *Literary Notices.*

Michaux's North American Sylva.—A new edition of this splendid and valuable work is announced as now preparing for

publication. It will appear in four volumes; the three first the same as the old edition. The fourth volume, which is an additional one, will contain all the finest trees discovered in the Rocky Mountains, the territory of the Oregon down to the shores of the Pacific, and into the confines of California, as well as in various parts of the United States. To be illustrated by forty finely colored plates.. Edited by Thomas Nuttall, Esq., F. L. S.

The first volume was to be ready in July, and the succeeding volumes at short intervals, so that the whole will be completed the present year. The first three volumes will be eight dollars each, and the fourth six dollars. Subscriptions are received by J. Dobson, 106 Chestnut street, Philadelphia.

The Third Edition of the American Orchardist, by William Kenrick, is now in press, and will soon be issued. It contains many additions and corrections.

A Second Edition of Liebig's Organic Chemistry will appear this autumn. The new edition will contain additional matter, in reference to experiments which have been made with charcoal, &c. We are glad to learn that this work has been so extensively read as to call for another edition at so early a day.

The Fourth Report of the Agriculture of Massachusetts, by Mr. Colman, Commissioner for the Agricultural Survey, is now passing through the press.

MISCELLANEOUS INTELLIGENCE.

ART. I. Domestic Notices.

Peaches in pots.—It will probably have been noticed, in a late report of the Massachusetts Horticultural Society's exhibition, (p. 217,) that some excellent specimens of Coolidge's Favorite peach were shown by Capt. George Lee, of West Cambridge, which reflected great credit upon his skill in the cultivation of the peach tree in pots. Capt. Lee is a veteran sailor, having passed nearly thirty years of his life upon the sea, and only within a few years has given much attention to gardening, at his beautiful place near Fresh Pond. He was induced to try pot cultivation, from reading our article which

appeared some time since, (Vol. II., p. 241,) and has relied solely upon that article for all his information upon the growth of his trees: but with only the experience of two seasons, he has accomplished what few gardeners have done, viz., the production of a crop of ripe peaches in the month of June, from a tree in a pot, only twenty-one months from the bud. The peaches were well colored, and of superior flavor.

Those of our readers who are desirous of growing the peach in this manner, are referred to the article above named, where they will find the details of our experience upon the subject.—*Ed.*

Fine picotee Pinks.—Our correspondent, Mr. S. Walker, has shown us a few specimens of fine new picotee plants, imported last autumn. Most of the plants received at that time have flowered, though, of course, not as well as they will another season: one or two of them, however, were very fine; one which we examined, measured two and a half inches in diameter; the fringing was extremely delicate, and the color deep and rich.—*Ed.*

Cereus cylindricus.—A plant of this species lately flowered at the nursery of the Messrs. Winship, Brighton. The flower was shown to us by Mr. Story, but not until it had begun to close up, so that we could not distinctly describe it. It is a large white flower, with the tube about nine inches long, and somewhat resembling, we should judge, *Echinocactus Eyriésii*, or rather, perhaps, between that and *Cereus triangularis*. The expansion of the flower was about six inches. We regret that we did not see the flower when in full perfection, that we might have fully described it, as it is the first time, we believe, that it has flowered in this country. The plant had but one bud.—*Ed.*

Destruction of the Rose Slug.—There can be no doubt about the efficacy of Mr. Haggerston's discovery in killing the rose slug, and indeed a great number of other destructive insects, such as the thrips, aphids, &c. We can recommend it as perfectly effectual in killing them, and do not doubt it will be found equally valuable in preventing the depredations of the Dahlia bug, (so called,) the yellow bug on cucumbers, &c. We would suggest its trial on all troublesome insects.—*Ed.*

New striped leaved variety of the Horse Chestnut.—Our correspondent, Mr. W. Kenrick, Newton, has sent us specimens of a seedling horse chestnut which grew in his nursery. It is a curious sport. Some of the leaves are wholly white, some half white and half green, others striated in various forms, while a few are wholly green. If it continues to retain its sportive character, it will be a good addition to our hardy trees, and particularly to the list of variegated leaved ones, of which but a few are worthy of a place in the pleasure ground.—*Id.*

Massachusetts Horticultural Society.—The thirteenth annual exhibition of the Society will be held on Wednesday, Thursday, and Friday, the 22d, 23d, and 24th of September, 1841. On Friday, the 24th, the members will celebrate their anniversary by a public dinner at Concert Hall.—*Ed.*

The Annual Exhibition of the Burlington (N. J.) Lyceum will be held on the 29th and 30th of September. Several premiums are offered for various flowers and fruits.—*Id.*

ART. II. *Massachusetts Horticultural Society.*

Saturday, July 31.—Exhibited. Flowers:—From Messrs. Winship, specimens of *Hypêricum elatum*, frondosum, and *Kalmidnum*, *Aconitum variegatum*, *Clématis flammula*, and *Xylósteum album*. From S. R. Johnson, pinks, carnations, verbenas, and the double-flowered pomegranate. From Misses Sumner, bouquets. From D. Macintyre, Ne Plus Ultra dahlias. From J. Hovey, carnations and bouquets. From S. Walker, phloxes, pentstemons, *Aconitum variegatum* (a fine specimen,) and bouquets. From Hovey & Co., bouquets. From Capt. Macondry, dahlias.

Fruits:—From Hovey & Co., very handsome Franconia raspberries. From O. Johnson, fine specimens of black Hamburg and Zinfindal grapes. From J. Hovey, early Harvest apples. From A. D. Williams, large red and white Dutch currants. From Capt. Macondry, early red plums, without name, (supposed the early scarlet Cherry plum.) From J. F. Allen, beautiful peaches. From Messrs. Winships, Plumstone Morello, and Belle Magnifique cherries. From J. Lovett, Beverly, seedling currants (very large and good,) and gooseberries. From S. Sweetser, tomatoes. From J. L. L. F. Warren, tomatoes, wholly of out of doors growth.

July 31.—A quarterly meeting was held to-day. [Owing to want of room, we are compelled to omit the doings of the Society, with the exception of giving the names of the Committee of Arrangements for the Annual Exhibition, on the 22d inst.]

The meeting voted to hold its annual exhibition of fruits and flowers, and a committee was appointed to report a list of names for the Committee of Arrangements, for carrying the same into effect. The Committees are as follows:—

Committee of General Arrangements.—S. Walker, J. Winship, L. P. Grosvenor, M. P. Wilder, J. Stickney, J. J. Low, J. L. Russell, R. T. Paine, C. M. Hovey, J. E. Teschemacher, O. Johnson, D. Haggerston, W. H. Cowan, R. Manning, C. Newhall, J. M. Ives, G. Brown, J. Breck, W. McLennan, W. Kenrick, S. R. Johnson, S. Sweetser, P. B. Hovey, Jr., J. A. Kenrick, J. L. L. F. Warren, W. E. Carter, J. W. Russell, R. Howe, S. Pond, J. Hovey, A. Bowditch, W. B. Kingsbury, A. Story.

Special Committee to decorate the Hall, and to take charge of the flowers and fruits.—S. Walker, W. Oliver, B. V. French, J. L. L. F. Warren, P. B. Hovey, Jr., and A. Story.

Committee to make a Report of the flowers, fruits, and vegetables exhibited.—S. Walker, B. V. French, J. L. L. F. Warren, P. B. Hovey, Jr.

Exhibited. Flowers:—From Capt. Macondry, several dahlias, among them Marshal Soult, and Fire-ball. From J. Hovey, carnations and bouquets. From J. A. Kenrick, bouquets. From W. Kenrick, bouquets. From S. Walker, large and showy bouquets. From J. L. L. F. Warren, dahlias and bouquets. From Mr. Winslow, *Bignônia grandiflora*, and dahlias.

From the President of the Society, a fine flower of *Constantia dahlia*, cut flowers of *Portulâca Thellusonii* (a fine new variety,) and the new scarlet geranium. From Hovey & Co., seedling phlox-

es and bouquets, and ten or twelve varieties of verbenas. From D. Macintyre, a good flower of Ne Plus Ultra dahlia. From Misses Sumner, bouquets. From W. E. Carter, Hibiscus sp., and a bouquet.

ART. III. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
	\$ cts.	\$ cts.	\$ cts.		\$ cts.	\$ cts.	\$ cts.
Potatoes, new:				Summer squashes, per doz.,	10	12½	
Chenangoes, per bushel,...	75	1 00		Autumnal Marrow, per pound	1	2	
Early white, per bushel,...	75	—		Winter Crookneck, per lb.,	1	1½	
Sweet potatoes, per bushel,	1 50	2 00		Pumpkins, each, ...	12½	20	
Turnips:							
New, per bushel,.....	75	1 00					
Onions:				<i>Fruits.</i>			
Red, per bunch,.....	2½	3		Apples, dessert, new:			
White, per bunch,.....	2½	3		Common, per bushel,....	75	1 00	
White, per bushel,.....	75	1 00		Porter, per bushel.....	1 50	2 00	
Beets, new, per bushel,....	75	—		Crab apples, per bushel...	1 50	2 00	
Carrots, new, per bunch,...	4	6		Pears, per half peck:			
Shallots, per pound,.....	20	—		Julienne.....	37½	—	
Garlic, per pound,.....	12½	—		Bartlett,.....	50	75	
Horseradish, per pound....	8	10		Capiaumont,.....	37½	—	
				Orange,.....	25	—	
<i>Cabbages, Salads, &c.</i>				Common,.....	25	—	
Cabbages, per doz:				Plums, per quart:			
Savoy,.....	75	1 00		Washington,.....	37½	—	
Drumhead,.....	75	1 00		White Gage,.....	25	—	
Brocoli, each,.....	12½	25		Green Gage,.....	25	—	
Cauliflowers, each,.....	12½	25		Common,.....	12½	—	
Lettuce, per head,.....	2	3		Damson, per peck,.....	1 00	—	
Peas, per bushel,.....	1 00	1 25		Peaches:			
Beans:				Extra fine, per dozen,...	37½	50	
String, per half peck,...	12½	—		Good, per half peck,....	37½	50	
Shelled, per quart,....	—	—		Currants, per box:			
Limas,.....	17	—		Red Dutch,.....	10	12½	
Sievas,.....	10	12½		White Dutch,.....	10	12½	
Common,.....	8	10		Cucumbers, per dozen,...	6	8	
Sweet corn, per dozen,....	10	12½		Pickling, per hundred,...	20	25	
Peppers, per pound,.....	3	4		Tomatoes, per half peck,...	12½	—	
Mangoes, per dozen,.....	20	25		Watermelons, each,.....	12½	25	
Celery, per root,.....	10	12½		Muskmelons, each,.....	12½	25	
Cucumbers, (pickled) pr gal.	25	—		Cranberries, per bushel,...	2 00	—	
Peppers, (pickled) per gallon	37½	—		Grapes (forced), per pound:			
				Black Hamburgh,.....	62½	—	
				White Sweetwater,.....	50	—	
<i>Pot and Sweet Herbs.</i>				Pine-apples, each,.....	25	37½	
Parsley, per half peck,....	25	—		Lemons, per dozen,....	25	—	
Sage, per pound,.....	17	20		Oranges, per dozen:			
Marjorum, per bunch,....	6	12½		Sicily,.....	25	37½	
Savory, per bunch,.....	6	12½		Havana, (sweet).....	37½	—	
Spearmint, (green), pr. b'ch,	8	—		Cocoanuts, per hundred,...	—	—	
				Walnuts, per bushel,.....	—	—	

REMARKS.—Up to the present date the excessive dry season has continued, only one light rain having fallen since our last report: this refreshed the turnip and other surface crops, but did not penetrate to the roots of potatoes, and other vegetables which root deeply. The drought appears to be very extensive, reaching to New Hampshire, Vermont, and Maine, so that the potato crop in the latter state has suffered so severely as to fear the loss of all the stock beyond home consumption. We trust however that rains may soon come, that the late crops may yet receive the benefit of the same.

Vegetables.—Potatoes, in consequence of the dry weather, have advanced in prices and now command our quotations, and there is very little prospect of their falling below 75 cents per bushel. Sweet potatoes have come to hand the past week in good order. Turnips are tolerably abundant and good. Onions of the early bunch kinds are plenty, but the crop has suffered much from drought. Beets have come in by the bushel within the past week. Cabbages, of the better sorts are now received, but the crop will be light. Fine brocolis and cauliflowers come to hand. Lettuce large and good for the season. Peas are nearly gone. Rhubarb is now out of the market. Beans are tolerably well supplied, though the crop has suffered in common with other vegetables. Peppers are abundant. Mangoes are also supplied in fair quantities. Celery has just been received, the first of the season. Parsley is more abundant. Summer squashes are nearly gone: when the Autumnal Marrows come in, the former are very little called for: the Marrows are most excellent this year, owing to the warm weather, but there is not a heavy crop.

Fruits.—In apples, there is an abundance for the season, though of rather inferior quality: of good table apples there has been a scanty supply, until the Porters came to hand. Pears are very abundant, and many fine varieties, some of the more plentiful of which we have quoted, have been for sale. Plums have also been much more plentiful than in former years: besides the crop of fine ones in the vicinity, the market is supplied with quantities from New York. Peaches are abundant, but small; none are received this year from the south. Currants are nearly all gone. Cucumbers, for pickling, are now brought in freely. Tomatoes are very abundant; warm weather is favorable to a heavy and good crop. Muskmelons and watermelons plentiful. Forced grapes are now supplied, of most excellent quality, at our quotations. No new cranberries have yet been received.—*M. T., August 28, 1841.*

HORTICULTURAL MEMORANDA

FOR SEPTEMBER.

FRUIT DEPARTMENT.

Grape vines will now have ripened their fruit. When it has been cut, attention should be given to the vines. The house should be duly

aired, and every precaution taken to ripen the wood well ; for on this, in a great measure, the excellence of next year's crop depends. Guard against mildew. Pick up and sweep off all dead and decaying leaves, and if the vines are in a house where plants are kept, see that no water is spilt in watering the pots.

Strawberry beds may now be made. The late rains have so thoroughly moistened the ground, that plants will do better if set out now than if planted two weeks ago: keep the young plants free from weeds, and water if dry weather should take place.

Raspberry beds may be also made the latter part of the month.

Peach trees may now be budded with success.

Trees of all kinds should have attention. Make preparations to guard against the canker worm ; to do this effectually, let the trees be scraped smooth, that there may be no lodging places for the vermin.

FLOWER DEPARTMENT.

Dahlias will now be flowering finely. Keep the branches well tied up to stakes and prune freely, cutting away all large and useless shoots and disbudding the plant of weak and half-formed flower buds. Some of the finest flowers will open this month. September is the season to display the splendor of this flower.

Geraniums should now be repotted preparatory to their removal to the green-house or parlor.

Verbenas for keeping through the winter should now be potted.

Izias, *Sparaxis*, and other Cape bulbs, may now be planted.

Oxalises may be planted this month.

White lilies may be planted out now.

Roses, planted out in the border during summer, should now be taken up and potted.

Camellias should now be looked over; if any need repotting they should be attended to this month. The seeds may be sown as soon as gathered.

Pansy seed may still be sown, in order to produce fine plants for spring flowering.

Heliotropes, *Alloysias*, and other tender plants, placed out in the border, should be taken up and repotted.

Ericas that need repotting before spring, should be attended to now.

Mignonette and *sweet Alyssum*, planted last month, should now be carefully watered.

Chrysanthemums should be well watered, giving them occasionally liquid manure.

Paeonies may be removed the latter part of the month.

Perennial flowering plants may now be removed with safety.

Chinese primroses should be repotted this month.

Green-house plants, of all kinds, should be repotted, pruned, and such as need it, tied up to green sticks; the pots should be washed, and prepared for removing to their winter quarters.

THE MAGAZINE

OF

HORTICULTURE.

NOVEMBER, 1841.

ORIGINAL COMMUNICATIONS.

ART. I. *Select Villa Residences, with Descriptive Notices of each; accompanied with Remarks and Observations on the principles and practice of Landscape Gardening: intended with a view to illustrate the Art of Laying out, Arranging, and Forming Gardens and Ornamental Grounds.* By the EDITOR.

NO. 1. RESIDENCE OF A. J. DOWNING, BOTANICAL GARDENS AND NURSERIES, NEWBURGH, NEW YORK.

THERE are no situations in the country better adapted for beautiful residences, than are to be found on the banks of the majestic Hudson. Its whole course, from New York city to Albany, is one series of splendid and ever changing scenes, from the moment we pass the Palisades, till we step upon the landing at the latter city. At one period, its steep and abrupt declivities, clothed with a dense vegetation of lofty pines hemlocks, oaks, &c., which, from the great height of its banks, appear as mere shrubs,—startle us with their grandeur, as we pass along in the deep shade which they cast over the smooth waters;—at another, open and broad glades of rich and fertile country spread out, covered as with a carpet of verdure, varied by clusters and groups of trees, and backed by ranges of mountains, clad from the base to the summit with a vigorous growth of wood. Its now broad and glassy surface, reflecting its steep banks, is soon changed for the narrow and dark passage, almost beneath the craggy summit of some project-

ing cliff; opening again to present to the eye a new scene in the clustered dwellings which mark the numerous villages throughout its course. Those only who have passed and repassed what we have attempted to give some faint impression of, can appreciate the nobleness of the views which are every where obtained.

Newburgh is one of the pleasantest villages on the river. It is situated just above the entrance to the Highlands, ten or twelve miles above West Point, and about sixty from New York city. Passing West Point, where the river is not half a mile wide, it extends, opposite Newburgh, to the distance of a mile and a half. The banks, which a few miles below are fifteen hundred feet high, are here, in some places, easily approached from the river. Newburgh lies generally at the height, probably, of from fifty to one hundred and fifty feet above the level of the river: the streets are laid out parallel with its banks, and are crossed by others at right angles.

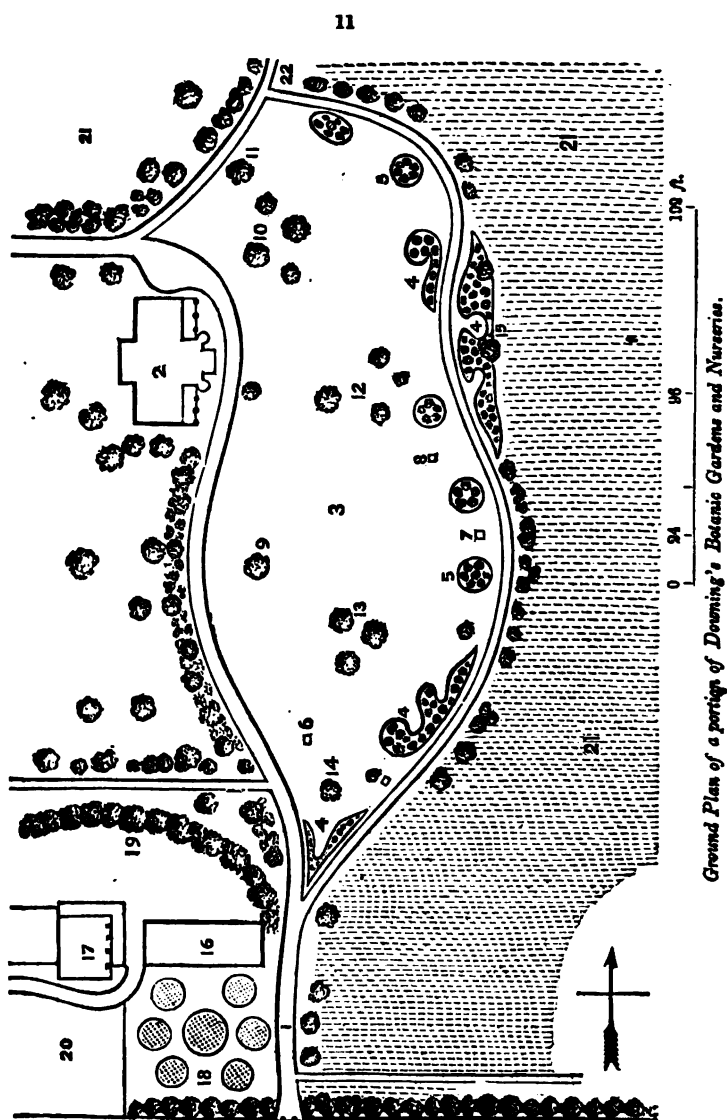
Newburgh possesses many interesting historical associations. The old house which formed Gen. Washington's head-quarters in the revolutionary army, and of which a very spirited and correct engraving is given in Sparks's *Life of Washington*, is not in so good condition as we could wish to see such a venerable relic of the war of 1775; it is situated in a bleak or rather exposed situation, with but one or two trees within the distance of a hundred yards: it commands, however, a beautiful view of the river and surrounding country.

The village we should judge, from its present appearance, to have been naturally an open and but sparsely wooded country. A few situations have been much beautified by forming plantations of trees and shrubs; but the town generally, contrasted with Fishkill, on the opposite side of the river, presents an exposed appearance.

The residence of Mr. Downing is situated about half a mile from the centre of the village. The grounds comprise about eleven acres of land, separated into three lots of nearly four acres each, by the streets, which, as we have before remarked, run at right angles. Mr. Downing's house is situated on the upper piece, or that farthest from the river, and the annexed ground plan represents a portion of this lot, laid out in the modern or English style. Commencing with this, we shall describe its different arrangements.

Its details, (*fig. 11*, p. 404) are as follows:—

1. Carriage road from the entrance.
2. House, of which a view of the entrance front is given at p. 407, (*fig. 12*.)
3. Lawn; which descends very gradually to the nursery grounds in front. The piece being too narrow to admit of greater width, the lawn was lengthened to have the appearance of more breadth of surface. This should be borne in mind by those whose grounds are so situated as to prevent their obtaining the requisite width. There is another object which should be taken into consideration, when forming a lawn in front of a house situated on the bank of a river, like Mr. Downing's, and commanding such fine views: the distant scenery would be hid by the extent of trees which would intervene, unless very judiciously managed.
4. Arabesque beds on the lawn, for choice flowers, such as roses, geraniums, fuchsias, *Salvia patens*, *súlgens*, and *cardinalis*, &c., to be turned out of pots in the summer season, after being wintered in green-houses or frames. Such beds should be sparingly introduced, or they would give the lawn a frittered appearance by cutting it up to an extent which would destroy its breadth, which constitutes its greatest beauty. It is even considered by some landscape writers, rather an error to introduce any forms but the circle, unless the beds are looked down upon from an elevated terrace, when these arabesque shapes will have a pretty appearance.
5. Circular beds for petunias, verbenas, which now form one of the principal ornaments of the garden, *Phlós Drummondii*, *nemophilas*, *nolanas*, dwarf morning-glory, &c.
6. Sun Dial. We are gratified to witness the introduction of the sun dial into our gardens. It is an old, but suitable ornament, and now that they can be procured at such reasonable prices, and such beautiful pedestals upon which to place them, we shall advise their general introduction into lawns and extensive flower gardens. We shall give an engraving, in a future number, of some of the pedestals made in New York, at the manufactory of Mr. Goodwin, corner of Chamber and Hudson Streets, and of Mr. Little, Chestnut Street, Philadelphia. A very neat dial plate is manufactured by S. Moore, of Connecticut, which may be had at the very low price of one dollar,



- and which answers every purpose. [These dials are offered for sale by Messrs. Hovey & Co., Boston, and G. C. Thorburn, New York.]
7. Large palms in pots, or Maltese vases, or vases made of artificial stone, set on the turf. In the introduction of vases, it should always be remembered that the vase should not be set down immediately on the turf, but upon a *plinth*. The *Agave americana*, and the variety *variegata*, are plants well adapted for good effect in such situations. Palms undoubtedly are the most noble objects, and an idea is conveyed of their effect in the front elevation of the house, (*fig. 12*;) but they are not easily managed in winter, except by those who have a hot-house.
 8. Rustic basket, for flowers, as represented in the engraving just referred to. These are very easily made. Mr. Downing has given a figure of one, in his *Treatise on Landscape Gardening*, where he states they may be made in the following manner:—An octagon box serves as the body or frame of the vase; on this, pieces of birch and hazel, (small split limbs, covered with the bark,) are nailed closely, so as to form a sort of mosaic covering to the whole exterior.
 9. Fine specimen of the arbor vitæ (*Thuja occidentalis*), about twenty feet high, represented in the view of the entrance front, as it stands on the lawn. This tree is one of our finest evergreens, attaining the height of twenty to thirty feet, forming a pyramid of verdure from the base to the top. The only objection to its more general use in plantations is its formal outline: but when planted near dwellings, especially those where horizontal lines prevail, it may be introduced with the happiest effect. Some object to it on account of the sombre hue of its foliage in winter, but those who have watched its growth through all seasons, will admit that its fresh appearance from early spring to the close of autumn, give it a claim, equal in importance to any of our evergreens.
 10. Group of magnolias, consisting of the following kinds:—*Magnolia conspicua*, (fifteen feet high,) *M. tripétala*, *M. auriculata*, *M. glauca* var. *longiflora*, and *M. Soulangeana*.
 11. Beautiful specimen of the Wahoo elm, (*Ulmus alata*.)

12. Group of trees of the following species:—the Osage orange, (*Maclura aurantiaca*), American linden, (*Tilia americana*) Weeping cherry, (*Cerasus vulgaris* var.) and *Virgilia lutea*.
13. Group composed of *Sophora japonica*, *Acer striatum*, and *A. Negundo*.
14. Fine weeping ash, (*Fraxinus excelsior* var.)
15. *Salisburya adiantifolia*; this stands on the opposite side of the lawn, and is yet a small specimen.
16. Green-house, about forty feet long and fifteen wide, with an office for the gardener in the rear.
17. Gardener's house, separated from the green-house by a passage-way.
18. Flower garden, in front of the green-house. It is laid out in circular beds, edged with box, with gravel walks. Under the arbor vitæ hedge, which is here planted against the boundary line, the green-house plants are principally placed during summer.
19. Hedge or screen of arbor vitæ, shutting out the back shed, compost ground, &c. The arbor vitæ is well adapted for this purpose, growing rapidly, and forming a perfect screen in three or four years.
20. Stable, house for packing trees, &c.
- 21, 21, 21. Nursery grounds.
22. Walk continued from the lawn through a part of the nursery, and connecting with the one which leads from the rear of the house.

Having thus far fully explained the ground plan, we shall take our readers with us in a walk through the grounds, remarking upon the various objects as they appeared to us in August last.

Commencing at the entrance gate, which we shall only stop to find fault with for the want of keeping in its Grecian style, with the Gothic architecture of the house, we pass by the flower garden, green-house, and a portion of the pleasure-ground, and arrive at the house, a finely proportioned building, in the Tudor style, of which the annexed engraving, (*fig. 12*, p. 407) gives a correct representation.*

* We are indebted to the kindness of Mr. Downing for this fine engraving, which was executed for his *Treatise on Landscape Gardening*, and appeared in that work.



Garden front of Mr. Downing's residence.

We now step into the hall, a room of ample dimensions, about ten by twelve feet: the floor is laid with marble tile, and fine cabinets of minerals ornament the back, opposite the door. Passing to the left, we enter the drawing-room, which is a handsome apartment, twenty-two by twenty-five feet, with a ribbed ceiling, and at the end a fine bay window. Passing out on the same side as we entered, we reach the library, which occupies the space back of the hall, between the drawing and dining rooms; this is lighted by a bay window eight feet wide; the book cases fit in flush with the wall. We here noticed a complete set of Loudon's works, including the *Arboretum Britannicum*; copies of the *Annales de Fromont*, and of the horticultural societies of Paris and Berlin; a copy of a beautiful French work, *L'Herbier de l'Amateur*, in eight octavo volumes, with finely colored plates; and another of a work very rare in this country, *Hofland's White Knights*, folio, with exquisite etchings of objects in landscape gardening, rustic seats, &c., together with many other interesting works connected with gardening. The dining-room is entered from the library, and is of nearly the same dimensions as the drawing-room. The piazza opens from the hall.

We now pass out on to the lawn in front, where a magnificent and enchanting view is obtained. The Fishkill Moun-

tains, a spur of the Alleghany range, that crosses the Hudson at West Point, and is continued until it connects with the Green Mountains, in Vermont, rise up in majestic grandeur, their rugged sides wreathed with a growth of wood. Below, and near West Point, is Beacon Hill, remarkable for its summit, which is fifteen hundred feet high. This was so named from beacon lights having been burned, in the revolution, on its top, to indicate to the country the progress and position of the army of the enemy at their work. The opening of the Highlands, at the lower end of Newburgh Bay, is perhaps the finest river scenery in America: the bold summits of Cro' Nest and St. Anthony, rising directly from the water nearly half a mile high, their rugged surface of the eternal granite, luxuriantly clothed with a rich vegetation of dark pines, dogwoods, oaks, &c. almost to the very top. It is here that the autumnal scenery of America may be seen in all its gorgeous richness of coloring; its mellow hues and deep tints appearing still more superb as we sail along upon the still surface of the water, almost beneath the bold cliffs. Looking up the river, the view, though tame in comparison with that below, forms a good contrast, from its more cheerful character.

We now continue our course along the walk, keeping to the right. We here, (10,) pass the group of magnolias, of which the *M. conspicua* is a good specimen, standing the winter without protection, and flowering every spring. The *Ulmus alata*, (11,) is a fine tree, of rather slow growth, but exceedingly picturesque in the outline of its branches. Farther on, we pass two of the circular beds (5,) filled with roses and other flowers: the arabesque bed (4,) planted with Bourbon roses, among which Dubriel and Madame Desprez were fine kinds, having immense clusters of flowers. At 12, we have the group of trees before noted, of which the *Mac-lura*, with its deep green polished foliage, is the most conspicuous. *Virgilia lutea* is elegant, earlier in the season, from its pendant racemes of yellowish white flowers. The rustic basket (8,) next attracts our attention: then the two next circular beds, raised in the centre, about eight feet in diameter, filled with petunias, which were very splendid: one was the *P. Grodmii*, a pink variety with a dark centre, and the other a deep rich purple, called *P. intermedia*. Again, we have another pretty group of trees, (13,) with the fine *Acer striatum* included, and near by, two arabesque beds (4, 4,)

filled with verbenas of different kinds, roses, *Sálvia pátens*, &c.; one of these beds is backed by a handsome specimen of the weeping ash. The sun dial is the last object which invites our attention, as we stand again on the main entrance. The pedestal is executed in the Gothic style, and we do not know of a single object which would add so much in itself to the finished appearance of the lawn. But on the opposite side of the walk, there is yet the green-house and the flower garden to be seen: the former, at this season of the year, when the plants are removed to the open air, possessing nothing of interest, we will not conduct our readers there, but pass by into the flower garden (18,) a small space laid out with seven circular beds; the centre one nearly twice as large as the outer ones: these were all filled with plants: a running rose in the centre of the large bed, and the outer edge planted with fine phloxes, Bourbon roses, &c.: the other six beds were all filled with similar plants, excepting the running rose, which would be of too vigorous growth for their smaller size. Under the arbor-vitæ hedge here, on the south side of the garden, the green-house plants were arranged in rows, the tallest at the back.

Mr. Downing's house was designed by himself, and all the details are carefully executed in the best taste and keeping: he was his own architect, furnishing the working plans, and superintending the erection of the whole: the arrangement of the rooms, and the accommodations, are very complete. It is but little over two years since the house was built and the lawn laid out as we have described it in the engraving, (*fig. 12*, p. 407.) The trees are nearly all yet of small size, but four or five years of vigorous growth will materially alter the aspect of the grounds, and give that expression to the lawn, which may be easily imagined from an inspection of the ground plan.

With this rambling but hasty walk we hope our readers have been gratified: we shall therefore leave them here while we add some account of the nursery department, which may interest all who are purchasing fruit and ornamental trees or shrubs.

The nursery business is now carried on under the name of Messrs. A. J. Downing & Co., Mr. C. Downing, though occupying a separate spot of ground, being concerned with his brother in the trade. We make these remarks, as some might

infer, from our giving a description of Mr. C. Downing's place separately, that his nursery had no connection with his brother's.

The grounds around Mr. A. J. Downing's house, are, as we have before remarked, in three lots of about four acres each: one piece laying below the square occupied by the house, and the other to the right of that, separated only by the street running to the river.

The ground in the rear of the house is filled with a great variety of ornamental trees: there is here, however, a row of pear trees of considerable size, which serve as specimen trees, each being grafted with several different varieties, in order to test their merits and their correctness. The fruit, this year, owing to the late frosts of May, was a scanty crop, and we found nothing new to note down, except that the pear described by Mr. Downing (Vol. III., p. 53,) as the *Mabille*, has proved to be the *Beurré Diel*. A raspberry, which is called the *new red Antwerp*; is sold from this nursery, and is larger and better than the old *Antwerp*; all that is known of its history is, that it was taken from a garden near Newburgh, where it was found growing and bearing in great perfection. We noticed a fine stock of the *Euonymus americanus* and *atropurpurea*, *Chimonanthus montana*, *Ornus europæus*, *Æsculus pavia* and *glabra*, cut-leaved alder, the willow oak, and the *Exmouth elm*. *Andona triloba* is hardy here. The frizzled filbert was bearing a prolific crop of fruit, and it is a valuable variety, well worthy the attention of all cultivators: Mr. Downing's article on the filbert, (p. 57,) will give all the information which may be wanted to grow the plants successfully. The *Cornelian cherry*, (*Córnus máscula*,) and the double sloe, are both fine showy shrubs, bearing an abundance of their ornamental fruit. The whole of this piece of ground is hedged with the English thorn.

We now pass into the lot below, which is mostly filled with fruit trees, particularly with several long rows of fine pears, plums, apricots, cherries, &c. Budding was going on with the cherry, plum, and peach trees. Here too, we saw a very extensive stock of fine tulip trees, (*Liriodéndron Tulipífera*,) and magnolias: numerous specimens of the *M. conspicua* grafted on the *M. tripétala* had made growths of three feet each since last spring. Why is it that the *Magnolia tripétala*, and *M. acuminata* and the tulip tree are so rarely seen

in our gardens? Is it because their great beauty is unknown? or is it that most individuals believe them to be too tender for our climate? No trees are more hardy than those we have named, and none more beautiful, both in their foliage and flowers. This piece was hedged with the Washington or New-castle thorn, (*Cratægus Crúg gálli*), and was far superior to the English thorn in the brightness and density of its foliage.

The opposite and last piece, occupied as a nursery, was planted with rows the whole length, of the different kinds of fruit trees, particularly peaches and cherries, and stocks of different kinds for grafting: this was also hedged with the Washington thorn. The soil of Mr. Downing's grounds is a rich loam, rather stiff in some places, but upon a dry bottom, and the surface gradually descending; all the superfluous water is carried off, and the trees have a stout and vigorous growth, with good masses of fibrous roots.

Mr. Downing has adopted what we should judge to be an excellent plan for marking the different kinds of trees, in order that there may be no mistakes by the name being effaced by the effects of the weather. It is simply a lead label, on which the name is stamped with iron types, thus: This label, which is about four inches long and one inch wide, is nailed on with tacks

BEURRE' DIEL. Budded Aug. 1840.

to a stout stake. An alphabet of letters may be bought for two dollars. The only objection to it, which however is of minor importance, is the difficulty of discerning the name at any great distance: but if it insures correctness, that is the main object.

This establishment was commenced by the father of Messrs. Downing about thirty years ago, and their correspondence is now very extensive, both abroad and at home. Trees are frequently sent to ten or twelve States in the course of a single year. Since the erection of Mr. Downing's house, and the publication of his work, he has had numerous applications from gentlemen of high standing, for his assistance in laying out gardens and grounds. Indeed, we believe he is the only person at present in the country, who is consulted professionally as a landscape gardener. We are glad to learn from Mr. Downing, that his *Treatise* on the subject has succeeded beyond his expectations, and we hope it will be the means of awakening the public taste to the importance of the art.

ART. II. *Notes made during a Visit to New York, Philadelphia, Baltimore and Washington, and intermediate places, from Aug. 8th to the 23d, 1841.* By the EDITOR.

[Continued from p. 374.]

Burlington, N. J., August 13.—Two years since, we passed a few hours at Burlington, and visited several fine gardens, some account of which we gave at that time, (Vol. V., p. 363.) During our present tour, from want of time, we only made a hasty visit to the nursery of our correspondent, Mr. T. Hancock, and the flower-garden of Mr. McKee.

The Burlington Lyceum, which has established annual exhibitions the last three years, has had a tendency to spread and improve the taste for gardening, in and around the city. The several exhibitions have been well got up, particularly that of the present fall; and the great variety of fruits and flowers exhibited, and the excellence which they displayed, reflects much credit upon the skill of the amateurs and gardeners in Burlington. While the large societies in the cities of New York and Baltimore have been suffered to decline, for want of zeal among their members, it is gratifying to find, in such small cities as Burlington, a sufficient number of enthusiastic cultivators, who are determined that no efforts of theirs shall be spared to keep up the taste, when the community have once become awakened to the importance of the subject.

Nursery of Mr. T. Hancock.—After the very full description which we gave of Mr. Hancock's nursery and grounds, in the volume above referred to, we shall not, at the present time, extend our remarks only to those additions and improvements which have been made since 1839.

The principal improvement, since our previous visit, has been the erection of a large and substantial green-house, upwards of eighty feet long, sixteen wide, and fifteen feet high; the back and front walls and ends are built of brick. The house is divided by a partition, one part being used as a hot-house. It is heated by two brick flues, which run along the front, and around and out at the back wall. There is a shelf

in front, and a large stage running to the back wall occupies all the room except the walk. The cost of the whole was about twelve hundred dollars.

The collection of green-house and hot-house plants has been very much increased, particularly the family of camelias, which Mr. Hancock appears to be quite partial to: he already has small plants of most of the best American varieties, and is now importing many of the more choice foreign kinds. The collection of roses, particularly of tender kinds, is very good. Among the hot-house plants, we saw, for the first time, the pepper tree in fruit. Of rhododendrons and azaleas he has several fine kinds, and is now making additions by importation.

In the open garden, the first objects which we noticed were the dahlias; we found an excellent collection of all the best kinds, and a hundred or more seedlings, saved from about thirteen hundred plants raised last year. One or two which we saw promised to equal the *Hero of Tippecanoe*. The plants had but just begun to bloom, but such flowers as were expanded, were very beautiful; if they continue good to the end of the season, they will be named. The *Hero of Tippecanoe* is a first rate dahlia, but its prolific habit of flowering is apt to unfit it as a show flower in the fall, unless precautions are taken to have two crops of plants, one for early blooming, and one for late. It flowers so very abundantly, that those plants which commence blooming in July exhaust themselves by September, so that the flowers are not perfect. To those who grow this variety as a show flower, this hint is important, in order that they may know when to depend upon it for exhibition.

The nursery we found in neat order, and the operation of budding being extensively performed, as it was just the season. Mr. Hancock has considerably increased his stock since 1839. He has a fine lot of peach and apple trees: of pears and plums his stock is quite limited. Among the ornamental trees, Mr. Hancock grows a great number of the silver leaved maple: it is a handsome formed tree, growing considerably more rapid than the sugar maple, and decidedly a fine tree for road-sides, avenues, and belts to plantations. We would advise a more general planting of it in the vicinity of Boston.

Passing a fine field of water-melons, Mr. Hancock called our

attention to a new kind, raised in Burlington, by Mr. Scott, a great melon grower, called Scott's Mountain Sprout. It arrives to the great weight of sixty or seventy pounds; grows fifteen to thirty inches long, and about eight to fifteen inches in diameter, the skin striped with light green. It is a rich, sweet, tender, and good flavored melon, equalling, if not surpassing, any we have ever tasted. Its great earliness will give it a place over the Imperial, which cannot be depended upon, even in the climate of Burlington. [Since these notes were taken, we have eaten this variety from our own garden, and can recommend it as a most superior variety.]

The crop of peaches wholly failed the present year: the crop of pears and apples was also very light, owing to the destruction of the fruit by the late frosts of May.

Among other things which attracted our attention, was a seedling white althæa, very beautiful, and worthy of extensive propagation. Mr. Hancock has a great number of seedling cherries, buds of which he was working on old trees, in order to ascertain the quality of the fruit as speedily as possible.

Mr. Hancock has lately issued his new *Catalogue* for 1841 and 1842, which may be had on application to him. Those of our friends who wish trees, may depend upon his correctness, and will find him honorable in all his dealings.

Flower Garden of Mr. William McKee.—This garden, which had just been commenced when we visited it in 1839, has now a very good collection of plants. In the green-house we noticed quite a number of camellias, and among them many of the best kinds, such as Sherwoodii, Prætti, philadelphica, Donckelaeri, &c.

In the open garden, Mr. McKee showed us a very fine althæa, double, pure white, with rose-colored centre, and of a free flowering habit. This variety we have nowhere else seen, except about Philadelphia and Burlington, but it is well worthy of general cultivation. Some seedling dahlia were in bloom, but we only noticed one which would come up to our notions of a perfect flower; this was a white one, tipped with rose, similar to Dodd's Mary, and we thought it deserving of a name.

Among a variety of evergreens, fruit trees, &c., we noticed a very pretty arbor vitæ, which very nearly resembled the Chinese. Mr. McKee informed us that the plants were raised from seed sown by himself, which he procured in Phil-

adelphia. The tree has the fineness of foliage like the Chinese, but with the vigorous habit and deep green color of the American species. It may probably be between the two. Though small, the trees were exceedingly beautiful, and we purchased two or three of them, in order to see how far they varied from the American and the Chinese species.

We were highly pleased to learn that the whale oil soap, that sovereign article for the destruction of the rose slug and various other insects, has been tried by many of our friends with complete success. Mr. McKee had been syringing his roses with it, and he had found it to be perfectly effectual, not only in destroying the slug, but the thrips and other insects injurious to plants. Mr. Hogg, of New York, had also tried it with the same excellent results. Mr. McKee's garden, though not extensive, is kept in good order, and filled with a good variety of plants.

Philadelphia, August 14.—With the exception of a short and very hurried visit which we made to this city late in the autumn of 1838, when returning from Baltimore, some few notes of which we made at that time, (Vol. V., p. 63,) we have not been in Philadelphia since 1837, and our last general account of the various gardens appeared at that period, (Vol. III., p. 201.)

Comparing the general taste for horticulture, in Philadelphia, with what it was in 1837, it must be acknowledged that it has increased and been more generally diffused than in any other city in the Union. This taste is apparent in the numerous glass structures which may be seen in passing through many of the principal streets, attached to the gardens of the more wealthy. We were indeed surprised, while passing through only a small portion of the city, to notice the neat appearance and high keeping of the small gardens and plats of ground, both in the front and rear of a great portion of the dwelling houses, particularly of those which have recently been erected. To the stranger who appreciates a taste for plants, this is so apparent that it at once attracts his attention. No such taste is displayed in other large places, and it strikes him as a peculiar feature of this city.

This general taste has given rise to a great demand for various kinds of plants, trees, &c., and, within a few years, several new commercial gardens have been established and carried into successful operation, and so far as we are able to

judge from a rather hasty inspection, the old as well as the new places appear to be doing a profitable business. Indeed, commercial gardening is based upon a better footing here than in any other city, and the encouragement which the proprietors have received from the public has been such as to enable them to import new and rare plants from abroad, when only to be obtained at very high prices, in advance of the nurserymen in other cities, and they are sure of a return of the money so extravagantly paid away. Relying upon the enterprise of the nurserymen, and willing that they should incur both the risk and trouble of importing new plants, amateur gentlemen do not attempt to keep up a continued competition by ordering for themselves. It is much better to wait a year longer, and be sure of possessing a strong and healthy plant, at a less price, than to be at the vexation and trouble of importing themselves. It is from this very circumstance, that the Philadelphia nurserymen are supplied with a stock of rarer plants than is to be found elsewhere in the country.

With such good collections to purchase from, always in the possession of something new and beautiful, the amateur is never at a loss to enrich his stock of choice plants; not with pots of unsightly looking objects, a branch here and a leaf there, requiring shade one day and sun the next, and casting a gloom of unhealthiness on all the surrounding objects until they have recovered the damage of long confinement—but with fresh, free growing, green, vigorous, healthy plants; cheerful, from the rich foliage and beautiful blossoms; delightful at once from their newness and beauty. It is from being able to possess such plants, that the amateur gardens in Philadelphia generally appear in such neat and well kept order.

The Pennsylvania Horticultural Society, under the presidency of Mr. Binney, has been in very successful operation. Its number of members has greatly increased within the last two years, and its exhibitions, as will have been perceived from the accounts of the same which have appeared in our pages, have been of the most interesting description. Its annual displays have surpassed any thing of the kind in the country, and have been one great means of spreading a taste for plants. Liberal premiums have been offered, and every inducement held out to encourage the amateur cultivator and the nurseryman and florist. We understood, at the time of our visit, that it was the intention of Mr. Binney to retire

from the office of President; but whether under his direction, or that of any other gentleman, it will, we hope, continue to exert the same beneficial influence in horticultural improvement.

Exotic Nursery of R. Buist.—Our memoranda of Mr. Buist's nursery, made in the fall of 1838, were so meagre, that we shall, in our present notice of his grounds, make our comparisons so far as improvements and additions are concerned, with their appearance in 1837, when we gave a detailed account of all we saw, (Vol. III., p. 202.) It may readily be imagined, from these remarks, that great changes must have taken place during so long a period as four years. Mr. Buist's being the most extensive exotic nursery in the city, the additions which have been made, particularly in the collection of plants, are altogether too numerous to detail here; but we shall endeavor to note down some of those which will be most interesting to a majority of our readers.

In 1837, Mr Buist's whole extent of glass consisted only of a range about two hundred feet long, a small hot-house, and a camellia-house, on his grounds near Lombard street. Soon after that period, he occupied a piece of land of about an acre in extent, nearly half a mile distant. On this place he has since built a number of pits and frames for the growth of various plants, to the extent of several hundred feet, and a span-roofed house, with a partition through the centre, above a hundred feet long.

The green-house plants were so grouped together in various places in the open garden, and so few, of course, in flower at this season, that we found less worthy to note than at a later period of the year. But commencing with the principal range of houses, and from thence into the open garden, we shall note such plants as appeared worthy of that distinction.

In the green-house, the first objects which struck us were the *Cacti*, of which Mr. Buist possesses a rich collection, several of them new and rare, together with a variety of seedlings of various ages from one to three years. So numerous were the species, and many of them unnamed, that we found it impossible to particularize them. In 1837, when visiting the gardens in the city, we found the beautiful *Echinocactus Eyriesii* very scarce; but now, it was nearly as abundant as the older sorts. It is naturally shy in throwing of its offsets, but by cutting off the top, as mentioned by us in a translation

of an article from the *Annales de Fromont* (Vol. III., p. 333,) it produces an abundance of young plants. The cactuses are all grown in a good soil, kept near the glass, and have a healthy and vigorous appearance. All the weak growing Cacti, such as *Epiphyllum truncatum*, *Ackermanni*, *Russellianum*, &c., *Cereus flagelliformis*, &c., are grafted on the *C. triangularis*.

Passing through the stove into the next compartment, we found a young and healthy stock of azaleas, embracing several of the new sorts, such as *A. variegata*, *lateritia*, double red, *purpurea speciosissima*, &c. We also saw here several of the new fuchsias; *F. corymbiflora*, with a few flowers expanded, but they were not sufficiently vigorous to bloom well; *F. eximia*, something like *fulgens*, but with smaller foliage and flowers, and a free bloomer; *F. Standishii*, which appeared to be the most free blooming of all, and of the neatest habit: the plants were all small, but the latter was displaying an unusual abundance of flowers for its size. We hope to see these new kinds attracting more attention. At the last exhibition of the London Horticultural Society, July 10th, they were one of the principal objects of attraction; some of the plants were grown four feet high, and proportionally broad, and were covered with innumerable blossoms. The beautiful *Lisianthus Russellianus* was also displaying its large blue cup-shaped flowers. Among a stock of epiphyllums here, we noticed a quantity of the new one, *E. Russellianus*, a spring flowering species, lately introduced, and stated to be very beautiful. A species of the *Hardenbergia*, nearly allied to the *kennedias*, with very large clusters of flowers, the finest of the genus, is a valuable addition to our green-house climbers.

In the open ground of the larger garden, we found a collection of herbaceous plants, and among them several new phloxes,—*P. seta*, a fine white one; *P. Coldriana*, with large panicles of purple flowers; *P. longiflora*, with pyramidal spikes of pure white flowers, elegant from the elongated tube of the corolla, from whence its name; *P. cordata grandiflora*, with large clusters of rosy purple blossoms; *P. multiflora*, of rather dwarf habit, but with dense heads of neat purple flowers; and a seedling of a rich purple.

Mr. Buist's collection of roses is very extensive, and embraces a great many of the newest kinds: we had not time to

go over them all, but the following, quite new, were exceedingly fine;—Chamelion, Ariel, Bougère, pale rosy bronze, Magnolian, double, deep crimson, Clara Sylvain, white, Etna of Luxembourg, Roi de Cramoise, and the crimson Lawrenceiana, all teas or Chinese kinds. The collection of Isle de Bourbons was also very select: these, as indeed all the roses, were grown in beds in the open garden, where they throw up much stronger shoots than when in pots, and are more readily propagated and protected in winter. The beds being narrow, a row of frames is placed over them, and the plants, covered with straw and mats, stand the winter without injury. In May, these frames are removed, the ground cleared up, and the roses soon send up large and vigorous shoots, which are terminated with numerous flowers, in much greater perfection than if the roots were crowded into pots. This method of growing the rose is practised very little around Boston, but we would invite all our floral friends who wish to see roses in their greatest beauty, to try this plan.

Mr. Buist now grows a great many of his camellias in frames, and thinks they flourish better; his plants certainly looked very healthy and strong. The frames are set on the surface of the ground, and the interior dug out sufficiently to let the tops of the taller plants beneath the glass. In the summer, the glass is covered with a coating of lime-wash, and in the winter the frames are banked up, and covered with straw or litter, to prevent the frost from penetrating. A great number of small plants may be placed in a small frame, and thus the expense avoided, to those who have only limited collections, of a green-house. Occasionally, the frame may be opened, and a few plants taken to the parlor to bloom. Stocks for working keep admirably in this manner. The camellias are now very extensively cultivated by grafting instead of inarching.

The rhododendrons are grown in a very low house, the walls only as high as the surface of the ground. In this manner, with the top protected, they do not need any fire heat, and preserve their deep green foliage much better. Mr. Buist's house, now about thirty feet long, is to be enlarged to about a hundred feet. It contains a large assortment of species and varieties, and among them a good stock of the *R. Noblednum*, a hybrid of much beauty, and very desirable from its habit of blooming freely when only a foot high.

Mr. Buist possesses a very rich and extensive collection of

plants; and he certainly deserves great credit for his endeavors to introduce the newest and rarest species and varieties. In our last account of Mr. Buist's garden, he thought we did him injustice in some remarks which we then made in relation to his collection of camellias: it was not our intention to have done so; for however excellent other collections might have been, his was sufficiently extensive to have the merit of having been one of the best.

The green-house and hot-house plants generally, and the camellias in particular, appear to be grown better now than they were in 1837. Every thing looked uncommonly strong and vigorous, and seemed to have had good attention and care. Mr. Buist's foreman is a very excellent cultivator.

Residence of James Dundas, Esq.—At the corner of Broad and Walnut streets, we visited the garden of Mr. Dundas. It is of recent formation, and occupies, with the dwelling-house, a piece of ground about two hundred feet square. The dwelling-house and green-house were erected last year, and the garden laid out the past spring, under the direction of Mr. Hutchinson, the gardener. The house fronts on Walnut street, with a small conservatory attached in the rear, and entered from one of the parlors. The house is built in the Grecian style, and the conservatory finished in good keeping with the architecture of the house, with pilasters, and a deep and ornamented entablature: it is about twenty feet in length, with a semicircular end, so that when the folding-doors are thrown open between that and the parlor, the whole appears as an oblong oval room, the end of the parlor being also semicircular: the doors which open into the hall and front room at the corners are set with looking-glass plates, and reflect the whole of the interior of the conservatory. In the evening, when the parlor is lighted up, this must have a most brilliant effect. The conservatory as well as the drawing-room, opens into a piazza.

The garden is laid out with a large circular grass plat in the centre, about a hundred feet in diameter, and back of this, against the wall in the rear, is the green-house, a handsome building, about thirty feet long and sixteen wide, corresponding in its architecture with the house. Besides this, there is a large pit, with a flue, appropriated to the growth of vegetables and plants. Descending by the steps from the piazza, the walk leads to the left, around the grass plat, by the green-house, and thence to the opposite side of the garden, and continues to the

front. On each side of the garden there are several small beds of irregular form, edged with grass, and filled with verbenas, *Portulaca grandiflora*, *Phlox Drummóndii*, petunias, &c. A large narrow border by the side of the garden wall was filled with choice standard roses and herbaceous plants; among the latter, several of the new phloxes enumerated in our notes on Mr. Buist's garden. On the grass plat are placed several large plants of oleander, &c.

The whole garden was in the highest keeping; the turf as smooth as a carpet, and of the deepest and richest verdure: the walks well filled and rolled; the grass edgings closely trimmed; and the beds of flowers completely covered with blossoms. We wish we could oftener see the same neatness observed in small gardens, and we would venture to assert that they would give more pleasure, with scarcely a single new flower, than a slovenly place, decked with all the *novelties* which the nurseries afford. Mr. Hutchinson appears to be well qualified for his situation, and we must acknowledge that we derived the highest gratification from an inspection of the garden under his care.

Garden of George Pepper, Esq.—One of the most choice and well kept amateur collections of plants in Philadelphia is Mr. Pepper's. The gardener, Wm. Chalmers, Jr., is an intelligent and skilful gardener, and we never saw plants look more flourishing, or in better condition. The camellias, for want of out-door room, are kept in the house the year round: the glass is coated over with whiting or lime-wash, so as to prevent the rays of the summer sun from injuring them, and by keeping the house well aired, they do better than when placed in an unfavorable situation out-doors.

All the plants which needed it had just been repotted: among those which were extremely showy, were the *Manettia cordifolia* and the *Lagerstrœmia indica*, the latter covered with its delicate crape-like blossoms. Why should this plant be so seldom seen in our gardens? Were its beauties fully known, we are sure it would always be found in every good collection of plants. It is so hardy that it may be placed in the cellar during winter, and in the summer set out on the lawn, where it will be one of the most attractive objects during July and August.

The palms in the hot-house have outgrown their premises, and are now suffering for want of more room. We wish Mr.

Pepper, who is so well able, would follow Mr. Perry's example, and build a *palm-house*. How grand would be the appearance of the *Latânia* and the *Pandanus* in a lofty and well built structure.

In the green-house, Mr. Chalmers showed us a seedling cactus, very similar to *speciosissima*, and an echinocactus with white spines of the most delicate texture, and so thick as to give it the appearance of being coated with white. All the cactuses are grown exceedingly strong: the *Cereus triangularis* is used for a stock upon which to graft all the weaker growing sorts. *Witsénia corymbosa* we saw here in flower; and a large plant of the beautiful *Euphórbia Jacquinæflóra* was over four feet high, and clothed with healthy foliage from top to bottom.

Nursery of Messrs. Ritchie & Dick, Kensington.—This establishment is about a mile from Chestnut street, on North Third street. It occupies four or five acres of ground, which are well filled with a collection of fruit and ornamental trees. The range of glass consists of a span-roofed house for camellias, about fifty feet long by twenty wide, and a hot-house and propagating house, each about forty feet in length. There is also a long, low, detached house for camellias, rhododendrons, azaleas, and other hardy green-house plants, about one hundred feet long. In addition to these, Messrs. Ritchie & Dick were about putting up a rose-house, upwards of eighty feet in length.

It was so late in the afternoon when we visited the place, that it would be doing injustice to Messrs. Ritchie & Dick's collection to attempt to give a detailed account of it: our notes must only be considered as merely an introduction of what we hope we may have the opportunity to offer at another time.

The camellia-house was very well filled with a good stock of young and vigorous plants; indeed, we have rarely seen a collection, taken together, better grown. The method of propagation adopted here is the French, that is, independent grafting, by which new kinds are very rapidly increased, and consequently sold at such fair prices that they may soon come into the hands of the amateur. In an article which we shall prepare in the course of our next volume, on the cultivation of the camellia, we shall explain the different methods of propagation, and accompany these explanations with engravings.

Messrs. Ritchie & Dick are the owners of the stock of the *Caméllia* var. *Hempsteadii*, already noticed in our pages, (p. 259:) we saw a well executed wax flower, and from that, should pronounce this variety to be of great value: it will be offered for sale another year. Among the newer kinds, we noticed good saleable plants of *C. var. Carswelliana*, *cœlestina*, *amabile*, *E'stheri*, *philadélpica*, *Dillèni*, *ochroleuca*, *Donckelaëri*, *tricolor*, *Sherwoodii*, *Juliana*, *Campbèlli*, *delicatissima*, *Fördii*, *Prättii*, *picturata*, &c. They also possess some very fine plants of the old double white, *variegata*, &c.

We shall only notice the collection of roses, which were planted out in a long narrow bed, over which a house was to be erected the present fall. The following is a list of a few of the best in each class:—

BENGAL.—Queen of Lombardy, Eugene Hardy, Fabvier, Marjoline de Luxembourg, Don Carlos, Belle Amelie, Stephens's new China, Lawrenceiana, Madam Arsant, Mansais.

TEA-SCENTED.—Cels, Goubalt, Princess Maria, Clara Sylvain, Bougere, Nephotos, Bon Silene, Victoria Modeste.

NOISETTE.—Fellemborg, La Cherie, Gabriel, Charles X., Lamarque, Monstrosa, Belle, Triumph de Bolivar.

ISLE DE BOURBON.—Madam Desprez, Hermosa, Marshal de Villiers, La Brun, Gloire des France, La Phoenix, Emily Courtier.

Another season, this bed must offer a display of flowers well worth seeing. Messrs Ritchie and Dick are enterprising men, and excellent cultivators.

[To be continued.]

ART. III. *Some notice of the Royal Victoria Grape Vine: with a brief account of a late Visit to Chatsworth, the seat of the Duke of Devonshire, Eng.* By the HON. T. H. PERKINS.

SIR,—In one of your late numbers, you mention the *Royal Victoria* grape, which was brought by me from England the last spring. I send you a printed description of it, which you

will use to what extent you please, for the information of grape-growers.

[The following is the description alluded to by Col. Perkins: it is a circular of the grower of this new variety, Mr. John Merrick, gardener to Pryse Pryse, Esq., Buscot Park. As this grape is now introduced, and will fruit another year in the grapery of our correspondent, we extract the following account of it, which may be interesting to all cultivators of the grape vine:—

Royal Victoria Vine.—This splendid new variety from the black Hamburg, was raised at Buscot Park, the seat of Pryse Pryse, Esq., M. P.

This grape is considered, by eminent judges, to be decidedly the finest black grape yet introduced, combining every admirable characteristic requisite in grapes.

The berries, which are of a fine oval shape, measuring from three to four inches in circumference, are of an exquisite flavor; the color is jet black, with a rich bloom; the weight of the bunches from two to three pounds; it is a prolific bearer, and well suited for early vineries or green-houses, and is admirable for continuing in good preservation on the vine a long time when ripe.

Two dishes of the above splendid grapes were presented to Her Majesty, in 1838, by Pryse Pryse, Esq., M. P., and were highly commended as possessing the above qualifications.

Specimens were likewise exhibited at Stafford Hall, Chiswick, last year, for which a silver medal was awarded. They have also obtained prizes at other horticultural exhibitions.]

By the kindness of Joseph Paxton, Esq., superintendent of the magnificent establishment of the Duke of Devonshire, at Chatsworth, I received from the grapery under his management, two new grapes, which, he informed me, were of very fine properties. The *West St. Peters*, he told me, was a great bearer, requiring but little heat, that is, artificial heat, and hung on the vine longer than any grape he was acquainted with, and, withal, a prolific bearer, as well as fine flavored. The other is called the *Cannon Hall*. Mr. Paxton also spoke to me in high terms of this grape, as well as the other. From the manner in which the above plants were sent to me, I have no doubt that the *St. Peters* will show fruit the next year, though I shall not suffer it to bring to maturity more than two or three bunches, for a year or two.

I have seen no description, in your Magazine, or, indeed, elsewhere, of the conservatory recently erected under the direction of Mr. Paxton,* (so well known for his beautiful work on botany,) on the estate of the Duke of Devonshire, at Chatsworth, and which is on a magnificent scale. It is finished, except as to the gateway leading to it: the cost is about fifty thousand pounds sterling, or two hundred and fifty thousand dollars. The length of the building is two hundred and seventy-five feet, its width one hundred and thirty feet, and the height sixty-five feet. It is of stout glass from the ground, and on all its surface. A palm tree, brought from a distance, and between thirty and forty feet high, is now flourishing in it: it was given to the Duke by Lord Tankerville, and the removal and expense in planting cost the Duke upwards of four hundred pounds.

The house is heated by warm water, and the chimneys communicating with the furnaces are not seen when at the conservatory, the smoke being conveyed by horizontal iron pipes, some hundred feet distant, and is lost in the forest. A piece of rock-work, more than twenty feet high, and which is ascended by a flight of stone steps, is at one end of the house; it is covered by orchideous plants, and from it is a fine view of the disposition of the plants which adorn the parterre below. There is a gallery quite round the house, and from it by opening a valve, water is thrown quite over the house. The house is stocked with the most choice exotics from all the habitable globe, and it is, in fact, the *ne plus ultra* of conservatories.

The mansion of the Duke, the paintings, furniture—among which are the coronation chairs from the time of the first George—gateway and park, water-works, are all in keeping with the structure spoken of.

The grape, peach, and pine-houses, (the garden being twelve acres in extent,) are at a distance from the residence of the Duke, and in the centre of which is Mr. Paxton's house, and which is all that could be wanted for a private gentleman.

Your obedient servant,

T. H. PERKINS.

Brookline, Oct. 1, 1841.

* A very short account of it was copied into our pages, (Vol. VI., p. 69,) from the *Gard. Mag.*—Ed.

ART. IV. On the growth of *Brugmansia suaveolens*. By R.

THIS fine exotic, too much neglected in collections, on account of its liability to the *red spider*, which, while disfiguring it, also unfits it for a place among green-house plants, yet is worthy the consideration of the amateur florist, as being so readily cultivated, and so beautiful in inflorescence. An individual plant, raised from a cutting since May, 1840, has given, at one time, twelve very large blossoms; and now, in a second stage of bloom, presents three flowers scarcely inferior in size. It measures only three feet in greatest height, and has six branches.

The mode of culture is simply detailed. Cuttings from the extremities of the branches will readily root in a few weeks, without any particular care. Promote a strong growth, and at the end of the summer, a few flower-buds will be formed. Should these expand, they will probably be small, unless blooming in a warm green-house. The protection of a light warm cellar will be sufficient for the winter. After repotting in the ensuing spring into a large sized pot, using leaf mould and sandy loam as compost, plunge into the open border. During the mid summer, especially should it be dry and warm, supply abundance of water. After the buds are well formed, and indeed as late as possible, avoiding frosts, raise the pot and give protection. Great supply of water will now be needed, as the flowers expand. The result will repay the experiment, in the production of a noble plant with highly scented and immaculate blossoms of large dimensions. To lovers of fine and unique plants of easy culture, and who are not possessed of plant structures, we can scarcely recommend a better subject for their skill. Our remarks, too, are intended for such:—to the general florist, or the owner of the green-house or stove, we are aware they are superfluous. Having hitherto seen the depauperated and diseased specimens which usually inhabit our green-house collections, with a straggling flower of tawny hue and drooping form, we were not a little prejudiced against this Peruvian beauty, until, by almost chance possession and culture, we were inclined to a different opinion. Many of the blossoms were twelve inches in length, and seven or eight inches across the mouth of the flower; so that if *size*, *fragrance*, and *intrinsic beauty* were any recommendations or desiderata, the *Brugmansia suaveolens* can lay claim to all.—R., *Chelmsford*, Oct., 1841.

REVIEWS.

ART. I. *The American Orchardist; or an account of the most valuable varieties of Fruit of all climates, adapted to cultivation in the United States, with their history, modes of culture, management, uses, &c.; with an Appendix on Vegetables, Ornamental Trees, Shrubs, and Flowers; the Agricultural Resources of America; and on Silk, &c.* By W. KENRICK. Third edition, enlarged and improved. 12mo., 449 pages. Boston: 1841.

MR. Kenrick's work has passed to a third edition, and that is the test of its merits. After the elaborate review of the second edition, in our pages, which appeared at the time it was published, (Vol. II., p. 30,) by one of our most intelligent correspondents, it is unnecessary for us to extend our notice of it at this time. It has been very thoroughly revised by the author, and several additions and improvements made in the body of the work, as well as the appendix. The author's visit to London and Paris enabled him to add some excellent hints upon the method of cultivating trees in those places, which will be read with gratification by American fruit growers. We have not found time to go over and compare the last with the present edition, but the time and expense the author has spent upon it, to make it a more correct work, must render it a more acceptable book to the American orchardist.

ART. II. *Boston Journal of Natural History; containing papers and communications read before the Boston Society of Natural History.* Vol. III., No. 4. 100 pages. Boston: 1841.

THE fourth part of Vol. III., completing that volume, appeared some time since, and has laid before us, awaiting a favorable opportunity for notice. It contains the concluding

portion of Mr. Tuckerman's article on the lichenes of New England. It is the best synopsis of the species that has yet appeared in this country, and of great value to the student of this interesting branch of botany. One hundred and twenty-seven species, and four permanent varieties, have been enumerated, and their stations given, of which fifty were not previously included in the United States' flora. This makes about two thirds of what the author has collected and received, and exclusive of the common species, which have not been mentioned in his list.

The uses of the lichenes are many and important, both to man and to the animal creation. The reindeer moss is stored for cattle, in the north of Europe. The Iceland moss (*Cetrària islândica*) is universally known: it is used in the form of flour, of which even bread is made; it is also an excellent dye stuff. The cudbear of commerce, of which whole cargoes are imported into Britain, is the *Lecanora tartàrica*; and numerous kinds are very valuable as dye stuffs. The whole article is interesting to the general reader as well as the botanist.

Art. II. is an attempt to ascertain some of the hepatic mosses of Massachusetts, by our correspondent, J. L. Russell. Fifteen species are enumerated. The other articles are upon the fishes of Ohio, and the shells of Massachusetts.

The Society possesses a valuable library, and its museum of curiosities, open to the public every Wednesday, is well worth a visit from all who are interested in natural history.

ART. III. *The Western Farmer and Gardener's Almanac for 1842.* By THOMAS AFFLECK. 1 vol. 12mo., 96 pages. Cincinnati: 1841.

A VERY good little work for the farmer, containing, in addition to the usual astronomic calculations, a great deal of valuable matter to the farmer. The article on hogs, alone, is worth the price of the volume. We would recommend it to the notice of our friends.

MISCELLANEOUS INTELLIGENCE.

ART. I. Domestic Notices.

Prairie flower.—From seeds gathered in the Illinois prairies, near the town of Audubon, I have raised and flowered the *Heliánthus pubescens Willd.*, (Syn. *H. canescens Mx.*) a pretty sun-flower of two feet height; perennial; with downy and almost clasping leaves; small brilliant blossoms, generally by twos, at the end of the branches, and worthy an humble station among the later autumnal plants of our eastern gardens.—*J. L. R.*, Oct. 25, 1841.

New Roses.—Our correspondent, Mr. S. Feast, of Baltimore, has raised two new seedling roses of considerable merit; one is a pink, and the other a purple. Mr. Feast has raised several seedlings well worthy of cultivation. We hope he will send us a description of the two new ones.—*Ed.*

Lisianthus Russellianus.—I was glad to see your encomium in your last number, on the extra fine specimen of this elegant and rare plant, exhibited at the last anniversary, from the Public Garden, and trust that its facility of culture will recommend it to a better and more general acquaintance.—***

Lobeliaceæ.—*Isótoma axillàris Lindley* (Syn. *Lobèlia senecioides Cun.*) A singular little lax-branching flower from New Holland, with pale bluish-purple blossoms, with very long tubes, terminated by five equal segments or limbs; and still longer peduncles, arising from the axils of the branches. Raised from seeds from the Jardin des Plantes, and can only be recommended for the green-house, and as a fit companion for *Lobèlia bicolor*, to hang prettily over the sides of small pots or shelves near the glass.—*J. L. R.*, Chelmsford, October, 1841.

Destruction of the Canker worm Grub.—A friend of ours informs us, that in tarring his trees, he uses a portion of India rubber, in the following manner:—A large or small piece of India rubber is dissolved in a sufficient quantity of whale oil to cover it. When fully dissolved, this substance is mixed with the tar, in the proportion of one third of the former to two thirds of the latter. With this the trees are tarred over, and the mixture retains its stickiness for a week or more. We would advise its trial, as well as that of India rubber alone, as mentioned in p. 17.—*Ed.*

Fine Pansies.—We have now in bloom a small bed of pansies, raised from seed sown in June, in the open garden. The situation is open, and exposed to the sun a greater portion of the day; but the plants have been in flower ever since the first of August, and have opened, notwithstanding the dry summer, some of the best flowers we have ever seen; our correspondent, Mr. S. Walker, who is a good judge in such matters, according to us the merit of having raised some superior varieties. We have had several of the plants taken

up in pots and placed in the green-house, where they are blooming beautifully. We shall name five or six of the finest.—*Ed.*

Pennsylvania Horticultural Society.—Since our remarks in Art. II. were sent to press, we have learnt from the *Proceedings of the Annual Meeting*, forwarded to us by our correspondent, Mr. T. Hancock, that Caleb Cope, Esq. was chosen President of the Society, in the place of Horace Binney, Esq., resigned.—*Id.*

Sowing Rocket Larkspur seed.—Though we have mentioned, in our monthly memoranda of work to be done in the garden, for November, that the seeds of this fine flower should be sown this month, yet we deem it necessary to remind our readers more particularly of the importance of attending to this, if a fine bed of flowers is desired. Plant any time this month, in a good bed of soil, in drills about one foot apart. No more care is necessary than to leave the bed till spring, when the plants will come up as soon as the frost is out of the ground, and bloom superbly in June.—*Id.*

Remedy for girdled fruit trees.—I have an apple tree which the mice girdled four or five years ago, taking the bark off for about eight inches. I saved the tree by taking three scions of the previous year's growth, and carefully inserting each end above and below where the bark was off, tying them on, and covering the wound with some grafting cement. The tree appears to thrive as well as if nothing had happened to it. (*Albany Cultivator.*)

ART. II. *Massachusetts Horticultural Society.*

Sept. 22d, 23d, and 24th.—The thirteenth annual *Exhibition of the Society* took place on the 22d, 23d, and 24th of September. In our last, we gave a full account of this interesting exhibition, with the exception of a list of the great variety of fruit exhibited, and the names of the numerous contributors. We complete our report as follows:—

FRUITS:—From the President of the Society, a fine display of pears, in all above fifty varieties, some of the specimens very beautiful, particularly the Columbian, Passe Colmar and Beurré Diel. The following are the kinds:—

Bleeker's Meadow, Louis Bonne of Jersey, Van Mons, Thompson, Welbeck, Rousselet de Rheims, Pope's Quaker, Burgomestre of Bolwiller, Seckel, Duchess d'Angouleme, Comprette of Van Mons, Bergamotte de Paques, Passe Colmar, Alpha, Buffum, Chaumontelle, Capiaumont, Belmont, Bon Chrétien Fondante, Bartlett, Roi de Wurtemberg, Belle et Bonne, Catillac, Long green, Glout Moreceau, Easter Beurré, Belle Lucrative, Beurré d'Aremburg, Pound, Monsieur le Cure, Heathcot, Urbaniste, Prince's St. Germain, Wil-

kinson, Columbian, Dix, Verte longue d'Automne, Cushing, Rouse Lench, Marie Louise, Queen Catharine, Culotte de Suisse, brown Beurré, Beurré Diel; also, Minister and fall Harvey apples, and orange quinces.

From R. Manning, the following collection of fruit, containing over one hundred and twenty-five kinds of pears, and above twenty-five of apples, as follows: Pears:—Queen Caroline, Whitfield, Wredon, Parmentier, Glout Morceau, Marquis, Henry IV., Roi de Wurtemberg, black Worcester, Wilkinson, Styrian, McLaughlin, winter Orange, winter Nelis, Prince's St. Germain, Bon Parent, Wilbur, Fig Extra, Croft Castle, Duchess d'Angouleme, Petre, Bon Louis Royal, Amandes Double, Neil, Tillington, Jalousie de Fontenay de Vendeé, Doyenne Nouvelle Bourvock, Beurré Duval, Passe Colmar, Beurré Diel, English autumn Bergamot, French autumn Bergamot, green pear of Yair, Surpasse Virgoulouse, Cumberland, Beurré Van Marum, Long green of Europe, Long green of America, Naumkeng, Flemish Beauty, Bishop's Thumb, Beurré de Angleterre, Althorp Crassane, Bartlett, Beurré d'Aremberg, Andrews, Duchess of Mars, Catillac, Uvedale's St. Germain, Foster's St. Michael, King Edward, Queen of the Low Countries, Bezi de la Motte, Marie Louise, brown Beurré, Urbaniste, Alpha, Beurré d'Amalis, Easter Beurré, Madotte, St. Ghislain, Bezi Chaumontelle, Comte de Lannay, Reine des Poires, Monsieur le Cure, Napoleon, Genesee, Colmar of Autumn, Comte de Michaux, Enfants Prodige, Belle et Bonne, Harvard, Epine d'Ete, Belle Lucrative, Cabot, Citron of Bohemia, Van Assene, St. Andre, Pailleau, Calabash, Rousselet de Meester, St. Germain Van Mons, Beurré Bonnet, Beurré Bosc, St. Michael, Johannot, Pope's russet, Charles of Austria, Sieulle, Beurré Bronze, Dumortier, Delight of Charles, Dundas, Buffum, Clara, Hooper's Bilbon, Long green, Dix, Fulton, Jalousie, Dearborn's (Van Mons,) Bowdoin, Easter Bergamot, Bezi de Montigny, Josephine, Lewis, green Sugar, Heathcot, Henkill, Hericart, Bon Chrétien Fondante, Frangipane, Fondante Van Mons, Echaserie, eight sorts of new pears from Van Mons unnamed.

Apples:—Crowninshield sweet, Superb sweet, Monstrous pippin, Rhode Island Greening, Pidgeonette, Danvers sweet, Victorious Reinette, Pennock's red winter, Canadian Reinette, Bellflower, Osipee Cream, Lyscom, Ribstone pippin, Murphy, new red Crab, Boxford, Gravenstein, Rambour Franc, Marden's Blush, Fall pippin, Fall Harvey, Sam Young, Pound, Ortleigh pippin, Ross Nonpareil.

From D. Haggerston, gardener to J. P. Cushing, Esq., the following varieties of pears, many of them specimens of great beauty:—Bartlett, Andrews, Bon Chrétien, Monsieur le Cure, Verte Longue, Sieulle, Beurré d'Aremberg, Chaumontel, Colmar Souverain, Beurré Rance, Beurré Blanc, Verte longue Panache, Duchess d'Angouleme, Fortunee, Beurré d'Angleterre, Bezi Vaet, Bergamotte Cadette, Beurré d'Amalia, Poir de Hiver, Beurré de Hiver, Doyenne Gris, Colmar, Colmar d'Ete, Beurré Diel, St. Germain, Napoleon, brown Beurré, St. Michael, Beurré Gris, Colmar Epineaux, Bezi de Montigny, Epine d'Ete, Belle et Bonné, Rousselet de Rheims, St. Germain Panache, Beurré Dore, Ne Plus Meuris, Gansell's Bergamot;

also, fine black Hamburg, Morocco, Muscat of Alexandria, white Sweetwater, and white Frontignac grapes: Nectarines,—Violet, Duc de Filley, Downton, Brignon, and red Roman: Peaches,—Royal Charlotte, Noblesse, Double Mountain, Royal George, white Magdalen, Gros Mignonne, Teton de Venus.

From Otis Johnson, a choice display of fine pears, as follows:—Buffum, Princess d'Orange, Burgomestre, Catillac, Pound, Beurré d'Aremberg, Summer Thorn, Roi de Wurtemberg, Easter Beurré, Duchess d'Angouleme, Passe Colmar, Bleeker's Meadow, Napoleon, Washington, Bon Louise de Jersey, green Sugar, St. Michael, Jalousie, Hericart, Bartlett, Admiral, Culotte de Swisse, Long green of Autumn, three kinds names unknown.

From William Kenrick, Newton, Pears,—Beurré d'Aremberg, Easter Beurré, Capiaumont, Glout Morceau or Beurré d'Aremberg of France, Duchess d'Angouleme, Fulton, Catillac, Dr. Hunt's Connecticut, Passe Colmar: Peaches,—Malta or Belle de Paris, Catharine, Old Mixon, Vineuse, Tardif, Pavie Abricote. From E. M. Richards, Dedham, Lyscom, Fall Sopsavine, Fall pippin, Seek-no-further, and Codlin apples. From S. Sweetser, Woburn, Martin Rarripe peaches. From Samuel Walker, Roxbury, Pears,—Capshaef, Bartlett, Fondante Bergamot of Van Mons, kind name unknown.

From B. V. French, Braintree, Pears,—Forelle, Beurré Romain, Jaminette, Long green, Louis Bonne, Beurré Van Mons, Buffum, Beurré Gris, five kinds unknown: Apples,—Dutch Codlin, Canada Reinette, yellow Bellflower, Jericho, Monstrous pippin, Ruggles, Moore's red Winter, French's Sweet, Gardiner's Striped, Gardiner's Sweet, and six varieties, names unknown. From A. D. Williams, Roxbury, Apples,—Porter, Ram's Horn, Lady, Gravenstein: Pears,—Bartlett, and a kind unknown: Grapes,—black Hamburg. From Dr. Burnet, Southborough, Pears,—Kenrick of Van Mons, Burnet, Henrietta of Van Mons; and seedling apples. From Walter Cornet, Milton, by Jos. Arnold, Jr., black Hamburg grapes. From John Hovey, Roxbury, Grapes,—Sweetwater, (open culture:) Peaches,—red Rarripe: Apples,—Pumpkin Sweet: Pears,—name unknown.

From Alexander McLennan, gardener to W. Pratt, Esq., Watertown, Grapes,—black Hamburg, St. Peters, Royal Muscadine, Sweetwater; and Bartlett pears. From William Hurd, Newton, Pears,—Bartlett: Apples,—Fall Harvey, Cathed. From Stephen Faunce, Jr., Roxbury, Grapes,—white Chasselas and black Hamburg, both open culture; and fine seedling peaches. From John A. Kenrick, Newton, peaches,—Spring Grove, Vanzandt Superb: Apples,—Baldwin, Hightop Sweeting, Hubbardston Nonsuch. From Samuel Phipps, Dorchester, Bartlett pears of great size and beauty. From Frederick Tudor, Nahant, Winship's peaches: Pears,—Bezi Vaet, Wilkinson, Beurré Rance, Napoleon, brown Beurré, Bleeker's Meadow. From John Hill, West Cambridge, Lemon Rarripe peaches, a large quantity, of great beauty. From Amos Hill, West Cambridge, Porter apples. From Edward Newberry, Brooklyn, Conn., a large basket of Jacques's yellow peaches. From N. D. Chase, Lynn, Crawford's early peaches.

From S. Pond, Cambridgeport, Pears.—Duchess d'Angouleme, Marie Louise, Beurré Diel, Andrews, Bartlett, Cushing, Burnet, Urbaniste, Dix, Easter Beurré, Julienne, Wilbur, St. Ghislain: Plums,—Lombard, Semiana, Corse's, Coolidge. From C. Ford, Roxbury, Pears,—two baskets of St. Michael, one basket of Seckel. From Thomas Dowse, Cambridgeport, Pears,—Seckel, and Broca's Bergamot. From Stephen W. Jackson, Boston, Orange quinces. From J. T. Wheelwright, Newton, Apples,—Washington, Greenings: Pears,—Bartlett, Chaumontelle. From D. B. Whitney, Northborough, Apples,—Quince, Red, Herefordshire, red Streak, blue Pearmain, Pumpkin Sweet, Cathead, Summer Pearmain, red Hainburg: Pears,—Beurré Bosc, Harvard. From Rev. Mr. Allen, Northborough, apples, names unknown. From Cheever Newball, Dorchester, Pears,—St. Michael, Pound, Beurré Rance, Beurré Diel, Bartlett, Napoleon, Surpasse Virgoulouse, Wilkinson, Chaumontelle: Apples,—Gravenstein, Williams's Favorite, Pippin.

From William Oliver, Dorchester, President peaches: Pears,—Duchess d' Angouleme, Seckel, St. Michael, Urbaniste, Capiaumont, Broca's Bergamot. From George Brown, Beverly, Pears,—Bartlett, Seckel, brown Beurré, Jalousie, Prince's St. Germain, Urbaniste, Easter Beurré, St. Michael, La Vanstalle or Princess of Orange, two French, names unknown: Apples,—Drap d'Or, Spitzemburg, Baldwin, Pomme d'Api, Creso, Sweeting, Pickman pippin, Siberian crab, blue pearmain: white Melacaton peaches: Harrison nectarines. From William Stearns, Salem, Pears,—Tarbell, Chelmsford, Endicott. From Josiah Lovett, 2d, Beverly, Pears,—Duchess d' Angouleme, Beurré Diel, Bartlett, Beurré d' Aremberg, Seckel, Bezi de la Motte, Roi de Wurtemberg: Apples,—Baldwin, Drap d' Or, Kilham Hill. From William McIntosh, West Roxbury, Apples,—Pumpkin sweeting, Roxbury russet, Fall russet, Snow russet, St. Petersburg: Pears, four kinds, unknown. From George Pierce, West Cambridge, Peaches,—Willow, Royal George.

From S. Downer, Dorchester, Pears,—Dix, Roi de Wurtemberg, Beurré Diel, Urbaniste, Fulton, Marie Louise, Beurré d'Aremberg, Wilkinson, Monsieur John: Apples,—Æsopus Spitzemburg, Show, Horn or Ramshorn, Pumpkin sweet. From J. F. Pierce, Dorchester, Squash apples, St. Michael pears. From L. P. Grosvenor, Boston, Pears,—Bartlett, Bon Chrétien, Bonne Louise, Urbaniste, Duchess d'Angouleme, Chaumontelle, St. Michael, Sylvancho Verte, Passe Colmar, St. Germain, Belle Harvard: Peaches,—Seedlings, three kinds: Apples,—Chandler, Porter, Greening, Pearmain, Queen Anne, Lewis's Favorite, black Gilliflower, Spitzemburg, Baldwin, Pippin, Peck's Pleasant, Hawthorndean, Nonsuch, Striped, Company, Benoni, Black. By S. G. Whiting, Dedham, Pears,—St. Michael, Whiting. By H. H. Crapo, New Bedford, Sweetwater grapes. By J. L. Ferguson, Isabella grapes.

From George Lee, West Cambridge, Apples,—Ribston pippins, Swan's sweeting: Pears, unknown: Elruge nectarines: native Perry grapes. From J. Fisher, Brookline, Pears,—Bartlett, Seckel, St. Michael, Andrews, Wilkinson, Roi de Wurtemberg, Passe Colmar, one unknown. From Nathaniel Clapp, Dorchester, Pears,—Bartlett, Broca's Bergamot: Peaches,—Seedling, Clingstones. From Ed-

ward Winslow, Roxbury, Roi de Wurtemberg pears: Melacaton peaches. From D. K. Wilder, Lancaster, by Mr. Carter, Boston, apple, known as the Graft, large and handsome. From S. R. Johnson, Charlestown, white Chasselas grapes, open culture. From P. P. Spaulding, Chelmsford, Pears,—St. Michaels, unknown (French.) From James Vila, Lexington, black Hamburg grapes. From Hovey & Co., Boston, Pears,—Long Green, of Autumn, and brown Beurré from dwarf trees on quince stocks.

From Elijah Vose, Dorchester, Pears,—Napoleon, Maria Louise, Urbaniste, Duchess d'Angouleme, Buffum, Dix, Bezi de la Motte, Long green, Warden, Cushing, Pope's Quaker, Roi de Wurtemberg: Apples,—Gravenstein, Boffum, Summer pearmain, Hawthorndean, Lady Haley's Nonsuch, large red sweeting. From N. N. Dyer, Abington, Apples,—Hightop sweeting, two seedlings. From Dana Dowse, Brighton, Monstrous pippin apples. From Kendall Bailey, Charlestown, Grapes,—white Sweetwater, Isabella, red Chasselas. From J. L. L. F. Warren, Brighton, Apples,—Gloria Mundi, Porter, Greening, Golden russet, River, Lady, Baldwin: Pears, Napoleon, Urbaniste, Seckel, Rousselett de Rheims, Julienne, brown Beurré, Maria Louise: Peaches,—red and yellow Rareripe, Teton de Venus, red Magdalen, Petite Magdalen, Petite France, Lemon rareripe, Late Royal George, yellow Melacaton, Kenrick's Heath. From John Hawkins, Baltimore, apples without name. From Messrs. Winship, Brighton,—Shepherdia, or Buffalo berry, Physalis peruviana, three kinds, a new fruit from Calcutta, South America, and the State of Michigan. From Francis R. Bigelow, Medford, Isabella grapes: Apples,—Rambour Franc, Monstrous pippin, red and green Sweet: Pears,—Spanish Good Christian, St. Michael.

VEGETABLES.—From M. P. Wilder, Dorchester, white carrots. From S. Downer, Dorchester, Missouri marrow squash. From W. McIntosh, Roxbury, Chenango potatoes. From S. Sweetser, Woburn, tomatoes. From Elijah Vose, Dorchester, Lima beans. From Francis R. Bigelow, Medford, Cherry tomatoes.

From Hovey & Co., Hancock's Early, Early Hill, Pollard and Dean potatoes: Autumnal Marrow squashes (true.) From J. L. L. F. Warren, Brighton, white Altringham carrots, Sugar beet, yellow, crimson and scarlet tomatoes. From Mr. Everett, Wrentham, Peach tomatoes. From Otis Johnson, Lynn, parsnips, carrots and watermelons. From Marshal Wyman, Woburn, tomatoes. From Josiah Lovett, 2d, Beverly, beets, carrots, &c., a great variety. From A. D. Williams, Roxbury, squashes, beets, carrots, purple egg plants. From John Hovey, Roxbury, tomatoes.

Sept. 25th.—An adjourned meeting was held to-day, but there being no business of importance to be transacted, it was dissolved. [We omitted to mention, in our account of the proceedings of the 18th, the following business, which was transacted at that meeting.

The thanks of the Society were presented to Mr. W. Kenrick, for the new edition of the *American Orchardist*.

A letter was read, from Mr. John P. Cloutman, on the subject of destroying the curculio, and referred to the Committee on Fruits.

Samuel C. Mann, of Dedham, and E. W. Mudge, of Lynn, were admitted subscription members.]

No exhibition was made to day.

Oct. 2d.—The annual meeting of the Society for the choice of officers was held to-day—the President in the chair. The committee appointed for the purpose, at a previous meeting, laid upon the table a printed ticket of officers for the ensuing year, and a motion being made, the meeting proceeded to the choice of said officers. Messrs. French and Grosvenor were appointed a committee to sort and count the votes. The whole number of ballots given in was thirty, and the following gentlemen were elected:—

President, M. P. Wilder.

Vice-Presidents.—B. V. French, Jona. Winship, C. Newhall, E. M. Richards.

Treasurer.—S. Walker.

Corresponding Secretary.—J. E. Teschemacher.

Recording Secretary.—Eben. Wight.

Professor of Botany and Vegetable Physiology.—John Lewis Russell, A. M.

Professor of Entomology.—T. W. Harris, M. D.

Professor of Horticultural Chemistry.—S. L. Dana, M. D.

STANDING COMMITTEES.

Committee on Fruits.—B. V. French, chairman; R. Manning, P. B. Hovey, Jr., L. P. Grosvenor, W. Kenrick, J. A. Kenrick, S. Pond, O. Johnson, S. Walker, F. W. Macondry, J. Breck.

Committee on Flowers.—C. M. Hovey, chairman; D. Haggerston, J. Breck, S. Sweetser, S. R. Johnson, W. E. Carter, J. Stickney.

Committee on Vegetables.—S. Pond, chairman; P. B. Hovey, Jr., Rufus Howe, John Hovey, A. D. Williams, J. A. Kenrick, J. L. L. F. Warren.

Committee on the Library.—M. P. Wilder, chairman; R. T. Paine, C. K. Dillaway, C. M. Hovey, B. V. French, S. Walker.

Committee on Synonyms of Fruits.—R. Manning, chairman, S. Downer, E. M. Richards, W. Kenrick.

Executive Committee.—M. P. Wilder, chairman; William Oliver, B. V. French, E. M. Richards, C. M. Hovey.

Finance Committee.—E. Vose, chairman; W. Oliver, B. V. French.

J. L. L. F. Warren declined serving on the Vegetable Committee.

It was voted that the constitution be amended by adding to the end of the twelfth article, the words following, "except that the officers elected on the first Saturday of October, 1840, shall continue in office until the first Saturday of April, 1842."

The Society also voted, that the sum of fifty dollars be given to Mr. Manning, as a gratuity for the great number of different kinds of fruits he has succeeded in cultivating, and for being so eminently conspicuous in advancing the interests of the Society.

Votes of thanks were passed to the Committee of Arrangements for the thirteenth annual exhibition, and to the special committee of arrangements for the dinner.

The following persons were admitted subscription members:—

Joseph Bradlee, Orra A. Tafts, Richard N. Perry, E. D. Clark, Nathaniel Greene, O. C. Wyman, Abel Phelps, John L. Tucker, Jabez W. Barton, George W. Gordon, Melancthon Smith, John Hill, John G. Tappan, and George Davenport, Boston; Nathaniel Tucker, Dorchester; Thomas Leighton, East Cambridge; E. Edes Bradshaw, Charlestown; H. Emerson, and Charles Robbins, South Reading; Z. B. Porter, Brighton; Thomas Smallwood, Newton; Samuel Barnard, Watertown; William N. Flynt, Monson; John Owen, Cambridge.

Dr. Edward Jones, of Louisville, Ky., and Isaac Hurd, of Cincinnati, were admitted as corresponding members.

Adjourned four weeks, to October 30.

Exhibited. Flowers;—From the President, a variety of dahlias, among which were Marshal Soult, Unique, Lady Bathurst, Fireball, Pickwick, Argo, Primrose, Danecroft Rival, Ovid, and Grace Darling. From H. W. Dutton, dahlias, including Charles XII., Pickwick, Striata formosissima, Mrs. Rushton, Unique, &c. From D. Macintyre, fine specimens of Hope, Eva, Pickwick, Ne Plus Ultra, and Lady Bathurst dahlias.

From Hovey & Co., a number of dahlias, among which were Lady Bathurst, Eva, Ne Plus Ultra, Splendissima, Lady Clifton, Unique, &c. From John Hovey, a number of dahlias and bouquets. From J. J. Low, Marshal Soult, Mrs. Cox, Pope, Eva, Virgin Queen, Lady Bathurst, and Suffolk Hero dahlias. From J. A. Kenrick, a variety of dahlias, among which were Eva, Bontisholl, Mrs. Rushton, &c. From Messrs. Winstips, bouquets. From J. L. L. F. Warren, bouquets.

Fruit:—From the President, fine brown Beurré and Calabasse pears. From R. Manning, Urbaniste, Beurré Bronze, Belle of Flanders, St. Michael, Foster's St. Michael, Bezi de la Motte, Long green, Jalousie, Heathcot, Alpha, brown Beurré, Fulton, Wilkinson, Jalousie (of La Vendée,) and a kind of pear name unknown. From J. A. Kenrick, fine lemon clingstone peaches. From S. Pond, blue Imperatrice plums. From S. R. Johnson, handsome Sweetwater grapes (out-door cultivation.) From Col. Bigelow, fine St. Michael pears, and blue pearmain apples. From P. Wainwright, large red apples. From J. L. L. F. Warren, peaches, and Schuyllkill and Sweetwater grapes.

October 8th and 9th.—Wednesday and Thursday, the 5th and 6th, were appointed by the Flower Committee for the second *grand dahlia show* of the Society; but owing to the unfortunate destruction of the plants by a severe storm of wind and rain, which occurred on the night of the 2d and 3d, it was impossible to make an exhibition at that time; but as arrangements had previously been made for the occasion, it was decided by the Flower Committee to put the time off to the 8th and 9th, with the hope that the plants might recover sufficiently to open a sufficient number of flowers, and make a good display.

The Committee were, however, disappointed, and the exhibition was so meagre that it was voted by the dahlia growers present, to dispense with the award of premiums according to the schedule offered, and to place the whole in the hands of the Flower Committee, for their further action.

A few stands were put up, as follows:—

PREMIER PRIZE.

H. W. Dutton, Jos. Stickney, J. Cadness, D. Macintyre, and Hovey & Co.

SINGLE BLOOM.

S. Sweetser, D. Macintyre, and J. Cadness.

DIVISION A.

Best twenty-four.—J. Stickney, Jos. Banks.

Best twelve.—J. Stickney, Hovey & Co.

Best six.—Hovey & Co.

DIVISION B.

Best six.—J. G. Sprague.

None of the stands were very good, or worthy of the premiums offered.

October 16th.—Exhibited. Flowers:—Several fine dahlias from Jos. Stickney, D. Macintyre, H. W. Dutton, P. Barnes, J. Cadness, and J. G. Sprague.

Some remarkably fine specimens were displayed:—a stand of six, viz., Hope, Eva, Conductor, Pickwick, Ne Plus Ultra, and Conductor, from Mr. Macintyre, was superb. A stand of six, comprising Hylas, Pickwick, Amato, Low's Conservative, Rienzi, and Eva, from J. Stickney, was also fine. Several other excellent stands of six were exhibited.

A few very superior specimens of pansies were exhibited by Messrs. Hovey & Co.

Fruit:—From W. Kenrick, Norton's Virginia seedling, and Elsinburg grapes. From Hovey & Co., Tokalon, and Pond's seedling grapes. From Capt. Lovett, winter Nelis, Prince's St. Germain, Passe Colmar, Bezi de la Motte, Duchess d'Angouleme, Easter Beurré, and Pound pears, all handsome specimens.

October 23d.—Exhibited. Flowers:—From Hovey & Co., a fine bloom of the Maid of Bath dahlia, the only one which has been exhibited during the season. From D. Macintyre, a fine specimen of Conductor. From Jos. Stickney, fine blooms of Grace Darling, Unique, Hylas, and Conservative. From H. W. Dutton, a variety of dahlias, among which were Grace Darling, Charles XII., and Constantia.

Bouquets were exhibited from J. Hovey, W. Kenrick, Misses Sumner, and J. L. L. F. Warren.

Fruit:—From Perrin May, Boston, two fine clusters of the black Hamburg grape, weighing a pound and a half each, raised in the open air. From the President of the Society, brown Beurré and Beurré Diel pears, and Gravenstein apples. From H. Plympton, St. Michael pears. From J. W. Sever, St. Germain pears. From B. Guild, a large handsome apple of excellent quality, from a tree imported from England by Capt. Wild, now growing on the estate of Mrs. A. Andrews, Lancaster, Mass.; the Committee did not discover its name. From J. L. L. F. Warren, Napoleon, Seckel, and two other kinds of pears; and Sweetwater, handsome Isabellas, Hamburg, and one other kind of grapes, and Porter apples.

ART. III. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Canada Crookneck, per lb...		1½	2
Chenangoes, } per barrel..	1	50	—	Autumnal Marrow, per pound		1½	2
} per bushel..		60	75	Winter Crookneck, per lb...		1	1½
Eastports, } per barrel...	2	00	2 25	Pumpkins, each, ...		12½	20
} per bushel...		1 00	—				
Common, } per barrel....	1	25	1 50	<i>Fruits.</i>			
} per bushel....		50	55	Apples, dessert:			
Sweet potatoes, per bushel,	1	00	1 25	Baldwins, per barrel.....	2	50	—
Turnips, per bushel:				Russets, per barrel.....	2	00	2 50
Common,.....		25	37½	Greenings, per barrel,...	2	00	2 50
Ruta Baga,.....		37½	50	Blue pearmain, per barrel,	2	50	3 00
Onions:				New York pippins, per bbl,	3	50	—
Red, per bunch,....		2½	3	Common, per barrel,....	1	25	1 50
White, per bunch,....		2½	3	Pippins, per bushel,....	1	00	1 25
White, per bushel,....	1	00	—	Porter, per bushel.....	2	00	3 00
Yellow, per bushel,...		50	75	Sweet, per bushel,.....	1	00	—
Beets, per bushel,....		75	—	Pears, per half peck:			
Carrots, per bushel,....		62½	—	Passe Colmar,.....	75	—	—
Parsnips, per bushel,....		75	—	Messire Jean,.....	50	—	—
Shallots, per pound,....		20	—	St. Germain,.....	75	—	—
Garlic, per pound,....		12½	—	Chaumontel,.....	50	—	—
Horseradish, per pound...		10	12½	St. Michael,.....	37½	50	—
				Common,.....	25	—	—
<i>Cabbages, Salads, &c.</i>				Baking, per bushel,....	1	50	1 75
Cabbages, per doz:				Peaches, per half peck,...	50	—	—
Savoy,.....	50	75	—	Tomatoes, per half peck,...	20	25	—
Drumhead,.....	75	1 00	—	Watermelons, each,....	12½	25	—
Red Dutch,.....	75	—	—	Citron melons, each,....	12½	—	—
Brocoli, each,.....	12½	25	—	Cranberries, per bushel,...	1	50	1 75
Cauliflowers, each,....	12½	25	—	Grapes per pound:			
Lettuce, per head,....	2	3	—	Black Hamburg, (forced,)	50	—	—
Beans, shelled, per quart,...	—	—	—	White Sweetwater (forced)	37½	—	—
Celery, per root,.....	10	12½	—	Isabellas,.....	12½	—	—
Cucumbers, (pickled) pr gal.	25	—	—	Cantawba,.....	12½	—	—
Peppers, (pickled) per gallon	37½	—	—	Sweetwater,.....	25	—	—
				Malaga, (white).....	20	25	—
<i>Pot and Sweet Herbs.</i>				Malaga, (purple).....	25	—	—
Parsley, per half peck,....	25	—	—	Pine-apples, each,.....	25	37½	—
Sage, per pound,.....	17	20	—	Quince, per bushel,....	2	00	2 50
Marjorum, per bunch,....	6	12½	—	Berberries, per bushel,....	75	—	—
Savory, per bunch,.....	6	12½	—	Lemons, per dozen,....	25	—	—
Spearmint, (green,) pr. b'uch,	3	—	—	Oranges, per doz.....	25	50	—
				Walnuts, per bushel,....	1	50	1 75
				Chestnuts, per bushel,....	2	25	2 50

REMARKS.—Two months having elapsed since our last report, owing to our remarks for October having been crowded out, there is quite an alteration in the market. Many articles which were then abundant, are now entirely gone, and of others the stock is nearly exhausted.

The month of September was cool, and accompanied with a great deal of dull rainy weather, making up in some degree for the deficiency of moisture in August. Many crops, particularly late potatoes, ruta bagas, cabbages, &c., received great benefit from such weather. October continued favorable up to the middle of the month, without any hard frosts, which enabled the farmer to reap his crops at a favorable season, and in good condition.

Vegetables.—Potatoes, which at one period it was feared would be very scarce, have come in considerably abundant, and prices have continued to fall off a little up to the present time, and the probability is, that they will remain at about our present quotations for some time: Sweet are plenty, and very good. Turnips are abundant, and of excellent quality. Onions were never better; it is in such warm dry seasons that they arrive at full perfection. Parsnips have yet only come to hand in very small lots. Cabbages are rather late, and not as large as usual, but the present weather is favorable to their growth. Beans are all gone. Celery comes to hand of fine size, and excellent quality. Squashes are rather a medium crop of only medium quality: the dry weather of August nearly killed the vines: good autumnal marrows command our highest quotations.

Fruit.—The fruit market has been very well supplied throughout the fall: there was undoubtedly the largest stock of peaches the past season, ever raised in New England; the market was literally filled; great quantities were sent to the New York market, the New Jersey crop having totally failed; but notwithstanding this outlet, prices ranged exceedingly low. Plums were likewise very abundant, but the crop was injured by the heavy rains in the early part of September. Pears have been received in fair quantities, and of good sorts, such as are now named in our quotations. The crop of apples is very good, and prices will probably range about the same as they now are, for some time: handsome Porters, kept in good order, now command very high rates. Cranberries are plenty and good. Malaga grapes have been received, which, together with the stock of Isabellas and forced kinds, has afforded a good supply. Chestnuts are rather scarce: a very large crop was expected, but they have not come in only in small lots.—*M. T., Boston, October 29, 1841.*

HORTICULTURAL MEMORANDA

FOR NOVEMBER.

FRUIT DEPARTMENT.

Grape vines in the green-house will yet be perfecting their wood: as the leaves drop off they should be gathered up, and carried out of the house. Give air abundantly in all fine weather.

Strawberry beds should be attended to, and kept clear of weeds. New beds, planted late, may have a very light protection of leaves on the approach of cold weather.

Raspberry plants should be prepared for laying down the latter part of the month.

Currant and Gooseberry bushes may be transplanted now with safety.

Fruit trees of all kinds may be removed with good success this month.

Peach trees or grape vines in pots should be removed to the cellar the latter part of the month.

FLOWER DEPARTMENT.

Dahlia roots not yet taken up should be attended to immediately.

Tulips and hyacinths, if not already planted, may be set out any time this month with good success. Hyacinth bulbs may be put into pots, and placed in frames, where they may remain till January, when they may be removed to the parlor.

Peonies may yet be removed with safety.

Carnations and picotees should be placed in frames, for protection from severe frosts.

Azaleas should be sparingly watered now.

Chinese primroses may be repotted now.

Stock gilliflowers should be protected in frames, or removed to the green-house.

Camellias will now be swelling their buds, and should be liberally watered. Sow the seeds, if not done before.

Roses wanted for forcing, should be taken up and potted. Many of the half hardy kinds growing in the open border, should be covered up the latter part of the month.

Dwarf rocket larkspur, candytuft, clarkia, and other hardy annual seeds, should be planted this month.

Ericas should be carefully watered, and stand in an airy situation near the glass, if possible.

Oxalises may yet be potted for a successional crop of flowers.

Crocuses, narcissuses, lilies, and all kinds of hardy bulbs, may be planted out during November.

Verbenas, and all similar half hardy plants, may be kept in fine condition in dry frames, protected from the frost by a banking of earth, and a covering of straw or leaves over the top. *Dahlia roots* keep well in this way.

Geraniums, which have grown strong, may now be shifted into the next sized pots.

Chrysanthemum, after they have done flowering, should be removed to a frame or the cellar.

Mignonette, in pots, should now be placed on a shelf in the green-house, near the glass, or removed to the parlor; being careful not to give water too freely.

Cactuses, to flower well in the spring, should now have a situation in the green-house in a cool place, as near the glass as possible, and receive only small supplies of water, once or twice a week.

THE MAGAZINE

OF

HORTICULTURE.

DECEMBER, 1841.

MISCELLANEOUS INTELLIGENCE.

ART. I. *Foreign Notices.*

ENGLAND.

English Dahlia Exhibitions for 1841.—We presume that we cannot occupy a few pages of our Magazine more acceptably to a portion of our readers, particularly to all amateur cultivators of the dahlia, than to give some account of the dahlia exhibitions which have taken place in England the past autumn. The season appears to have been unusually favorable for an abundant bloom, and, from the reports which have already reached us, we judge that the exhibitions were superior to any thing ever before seen: this, of course, was to be expected, as the continued progress which the dahlia is making towards perfection, and the consequent necessity of discarding all the older and inferior kinds, which do not come up to the standard of beauty, must have rendered the shows of the past autumn uncommonly brilliant and splendid. Thus, while our own exhibitions have been ruined by the unpropitious weather, so that cultivators have not been able to test the merits of many of their newest and rarest kinds, it will be some gratification to learn how high the same varieties stand in the estimation of the English florists and amateurs.

In giving a synopsis of the various societies which have held their dahlia shows, we shall follow the same plan which we have adopted in previous years, that is, to give the names of the flowers which were contained in the stands which gained the highest prize at each of the several societies. It would be a long and laborious task to go over and select out individual kinds which have gained the most prizes, yet, so far as we can do so with certainty, we shall name a few, which appear to have been more successful than others, in carrying off prizes.

In addition, we shall also name a few of the new seedlings of 1840 and 1841, which have been awarded premiums as varieties of superior excellence; but these are fewer than in previous years, as

we are happy to perceive many societies have determined not to give any prizes for seedlings, unless they have some superior qualities to recommend them, above those already in cultivation. Such a course is the only true one to prevent the great quantity of new varieties from being palmed off upon the public at high prices, merely because they are new seedlings.

Our list of societies comprises all those of the highest standing in the kingdom, to the number of upwards of a dozen. As that at Salt Hill was probably the most celebrated of all, we shall commence with that exhibition.

Salt Hill Grand Floricultural and Dahlia Exhibition.—After a lapse of four years, the Salt Hill dahlia show has been revived under the immediate patronage of Her Majesty and His Royal Highness Prince Albert. The weather proved unfavorable, and prevented the attendance of royalty and of distinguished individuals in the neighborhood. But the exhibition was attended by all the celebrated growers in the country, and was allowed to surpass all other shows of the season. The prize was as follows:—

FIRST CLASS.—Thirty-six blooms, (nine entries.) A handsome pair of silver candlesticks to Messrs. Brown, of Slough, for *Le Grand Baudine*, Francis, yellow *Defiance*, *Springfield Rival*, *Bridesmaid*, *Royal Standard*, *Lady Cooper*, *Rival Sussex*, *Brown's Defiance*, *Widnall's Eclipse*, *Chef d'Ouvre*, *Maria*, *Egyptian Prince*, *Maid of Bath*, *King of Roses*, *Lady Middleton*, *Pickwick*, *Springfield purple*, *Lewisham Rival*, *Phenomenon*, *Suffolk Hero*, *Bedford Rival*, *Metella*, *Duchess of Richmond*, *Andrew Hofer*, *Beauty of the Plain*, *President of the West*, *Exquisite*, *Climax*, *Contender*, *Hope*, *Grace Darling*, *Rouge et Noir*, *Nicholas Nickleby*, *Regina*, and *Revenge* (Cox's.)

The first prize in the second class was also gained by Mr. Brown, and the first in the third class by Mr. Davis, the grower of the *Maid of Bath*.

The Salisbury and West of England Royal Dahlia Society.—This exhibition was a very fine one, and the prize awarded as follows:—

NURSERYMEN.—Fifty blooms. To Mr. Keynes, of Salisbury, for *Fanny Keynes*, *Constancy*, scarlet *Defiance*, *Argo*, *Andrew Hofer*, *Beauty of the Plain*, *Pamplin's Bloomsbury*, *Conservative*, *Le Grand Baudine*, *Elizabeth*, *Lady Middleton*, *Maid of Bath*, *Maria*, *Metella*, *Nicholas Nickleby*, *Pickwick*, *President of the West*, *Phenomenon*, *Penelope*, *Bree's Rosa*, *Rouge et Noir*, *Springfield purple*, *Bowling-green Rival*, *Springall's Conqueror*, *Contender*, *Climax*, *Duchess of Richmond*, *Egyptian King*, *Grace Darling*, *Lewisham Rival*, *Marquis of Lothian*, *Ne Plus Ultra*, *Rienzi*, *Springfield Rival*, *Suffolk Hero*, *Rival Sussex*, *Admirable*, *Cattleugh's Eclipse*, *Widnall's Queen*, *Cattleugh's Tournament*, *Lynn Rival*, *Burnham Hero*, *Cox's Defiance*, *Widnall's Eclipse*, *Union Tournament*, *Diomedes*, *Stuart Wortley*, *Highgate Rival*, *Hope*, and *Marchioness of Breadalbane*.

Bristol and Clifton Dahlia Society.—The prize as follows:—Twenty-four blooms. Messrs. Maule & Co., for *Bishop of Winchester*, *Maid of Bath*, *Sir John Astley*, *Lee's Bloomsbury*, *Queen Dowager*, *Pamplin's Bloomsbury*, *Maria*, *Pickwick*, *Springfield Rival*, *Scarlet Defiance*, *Grace Darling*, *Hope*, *Rouge et Noir*, *Suf-*

folk Hero, Phenomenon, Conservative, Bridesmaid, Constancy, Argo, Duchess of Richmond, Penelope, scarlet Defiance, Le Grand Baudine, President of the West.

Nottingham Floral and Horticultural Society.—Prize as follows:—

DAHLIAS.—Twenty-four blooms. To John Spencer, for Highgate Rival, Danecroft Rival, Grand Tournament, Amethyst, Optime, Lee's Bloomsbury, Argo, Duchess of Portland, Springfield Rival, Pamplin's Bloomsbury, Maid of Bath, Metella, Springall's Conqueror, Phenomenon, Lewisham Rival, Conservative, Glory of the World, Emperor of China, Duchess of Richmond, Pickwick, Exquisite, President of the West, Cox's Defiance, and Egyptian King.

Oxfordshire Horticultural Society.—There was a very great competition among the dahlia growers, and the blooms were fine. The first prize was as follows:—

PREMIER PRIZE.—Eighteen blooms. To Mr. Betteridge, for Bloomsbury, Royal Standard, Cox's Defiance, Girling's Contender, Conservative, Exquisite, President of the West, Phenomenon, Hope, Ovid, Le Grand Baudine, Optime, Lady Middleton, Beauty of the Plain, Fanny Keynes, Elizabeth, Rienzi, and Lewisham Rival.

Sunderland Floral and Horticultural Exhibition.—This show is stated to have been superior to any thing of the kind ever seen in that part of the country. The prizes were open to all England.

NURSERYMEN'S CLASS.—Thirty-six blooms. To Messrs. Hodley & Sons, for Queen Dowager, Springfield purple, Andrew Hofer, Cattleigh's Eclipse, Beauty of Hyde Vale, Lee's Bloomsbury, scarlet Rival, Grace Darling, Maid of Bath, Hornsey Surprise, Henrietta, crimson Defiance, M. Neeld, Metella, Nicholas Nickleby, Lord Dudley Stuart, Cattleigh's Tournament, Dodd's Mary, Lady Middleton, Argo, Duke of Richmond, Phenomenon, Pamplin's Bloomsbury, Regina, Conqueror of the World, Rouge et Noir, scarlet Eclipse, Xerfoa, Squibb's Defiance, Majestic, Grand Tournament, Vesta, and Widnall's Queen.

Floricultural Society of London.—This society had a very splendid show, particularly of seedlings. The prize was as follows:—

NURSERYMEN.—Thirty-six blooms. To Mr. Bates, for Lee's Bloomsbury, Bree's Rosa, Maresfield Hero, Burnham Hero, Francis, Le Grand Baudine, Phenomenon, Suffolk Hero, Dodd's Mary, Marquis of Lothian, Andrew Hofer, Lady Kinnaird, President of the West, Duchess of Richmond, Rouge et Noir, Henrietta, Rienzi, Bishop of Winchester, Cox's Defiance, Conservative, Beauty of the Plain, Pickwick, Climax, Springfield Rival, Monarch, Hope, Argo, Springfield purple, Keyne's Constancy, Fanny Keynes, Amato, Exquisite, Lady Middleton, Maria, Oxfordshire Hero, and Maid of Bath.

Caledonian Horticultural Society, (of Scotland.)—The exhibition was very superior, and the competition in dahlias the most extensive and brilliant ever witnessed in Edinburgh.

NURSERYMEN.—Twenty blooms. To Messrs. Eagle & Henderson, for Marquis of Lothian, Duchess of Richmond, Maid of Bath, Hero of Navarino, Bishop of Winchester, Pickwick, Egyptian King, Fanny Keynes, Conqueror of the World, Hope, Cox's Defiance, Pamplin's Bloomsbury, Maria, Phenomenon, Rival Sussex,

Hero of Seven Oaks, Lady Douglas, Springall's Conqueror, Rienzi, and one unknown.

Everleigh Annual Dahlia Exhibition.—A splendid exhibition: the prize as follows:—

NURSERYMEN.—Thirty-six blooms. (Silver cup, value ten guineas.) To Mr. Keynes, for Grace Darling, Springall's Conqueror, Conservative, Andrew Hofer, Duchess of Richmond, Highgate Rival, Maid of Bath, Maria, Constancy, Widnall's Eclipse, Le Grand Baudine, Admirable, Cox's Defiance, President of the West, Hope, Marquis of Lothian, scarlet Defiance, Miss Johnson, Springfield Rival, Fanny Keynes, scarlet Le Grand, Rouge et Noir, Argo, Catleugh's Eclipse, Penelope, Elizabeth, Bedford Rival, Climax, Egyptian King, Conqueror of the World, Pavonia, Widnall's Queen, Beauty of the Plain, Nicholas Nickleby, and Brown's Defiance.

Kent and Canterbury Floral and Horticultural Society.—The show of dahlias was very magnificent; the prize stand containing as follows:—

DAHLIAS.—Twenty-four blooms. To Rev. C. Oxenden, for Hope, Defiance, Argo, Conservative, Bridesmaid, Lady Middleton, Metella, Marquis of Lothian, Pickwick, Andrew Hofer, Duchess of Roxburgh, Maid of Bath, Francis, Duchess of Richmond, Beauty of the Plain, Suffolk Hero, President of the West, Springfield Rival, Rival Sussex, Hero of Wakefield, Lady Mill, Amato, and Grace Darling.

Uxbridge Horticultural and Floricultural Society.—Prize:—

NURSERYMEN.—Twenty-four blooms. To Mr. Bates, for Lee's Bloomsbury, Amato, lanthe, scarlet Defiance, Bishop of Winchester, Conservative, President of the West, Le Grand Baudine, Duchess of Richmond, Bishop of Salisbury, Bree's Rosa, Andrew Hofer, Maid of Bath, Beauty of the Plain, Rienzi, Lewisham Rival, Springfield Rival, Windsor Rival, Hope, Nicholas Nickleby, Phenomenon, Grand Turk, and Pickwick.

Kingston Royal Horticultural and Floricultural Society.—The first class comprised stands of one hundred blooms each; but as that number is rather too long to enumerate, we take the second class.

NURSERYMEN.—Twenty-four blooms. To Mr. Wilmer, for yellow Climax, Bloomsbury Lass, Essex Rival, Amato, Admirable, Lady Middleton, Le Grand Baudine, Conservative, Lady Cooper, Glory of Plymouth, Constancy, Bloomsbury (Pamplin's,) Burnham Hero, Maria, Indispensable, Phenomenon, Duchess of Richmond, Suffolk Hero, Maid of Bath, Parsons's Beauty, Andrew Hofer, Mrs. Barclay, Bridesmaid, and Springfield Rival.

Royal South London Floricultural Society.—The names of one class only are given.

AMATEUR CLASS.—Twenty-four blooms. To Mr. Knight, for Widnall's Eclipse and Garrick, scarlet Defiance, Highgate Rival, Beauty of the Plain, Phenomenon, Lewisham Rival, Queen of Sarum, Grace Darling, Hylas, Optime, Pamplin's Bloomsbury, Perfection (Stubbs's,) Ruby, Rival Sussex, Exquisite (Holmes's,) Le Grand Baudine, Springfield Rival, Maria, Pickwick, Nicholas Nickleby, Andrew Hofer, Conservative, and Upway Rival.

Royal Horticultural Society of Cornwall.—This was a very splendid exhibition.

FIRST PRIZE.—Twenty-four blooms. To S. Davey, for Beauty of Redwith, Nicholas Nickleby, Amato, Avon Vale, Rival, Chinese, President of the West, Beauty of the Plain, Argo, Pickwick, Castanla, Dodd's Mary, Ringleader, Grace Darling, Lady Middleton, Pamplin's Bloomsbury, Monarch, Eva, Marquis of Lothian, Virgin Queen, Francis, Lee's Bloomsbury, and Royal Standard.

Embracing, as these do, the first stands of the several societies, some estimation may be formed of the real merits of the dahlias which have been among the successful flowers. The varieties which appear to have been most successful are Maid of Bath, Andrew Hofer, Lee's Bloomsbury, Pamplin's Bloomsbury, Optime, Phenomenon, Grace Darling, Widnall's Eclipse, Le Grand Baudine, Wheeler's Maria, Lady Middleton, Pickwick, President of the West, Conservative, Argo, Nicholas Nickleby, Duchess of Richmond, Widnall's Queen, Lewisham Rival, Fanny Keynes, Rouge et Noir, Catleugh's Eclipse, Hope, Suffolk Hero, scarlet Defiance, Climax, Metella, Holmes's Exquisite, Bridesmaid, Springfield Rival, Constancy, Royal Standard, yellow Defiance, Burnham Hero, Beauty of the Plain, Bree's Rosa, and Jones's Francis;—thirty-six kinds. Maid of Bath, Andrew Hofer, Lee's Bloomsbury, Grace Darling, Widnall's Eclipse, and Le Grand Baudine, are in nearly every prize stand.

Nearly all the latter thirty-six kinds have been grown the past season in the collections of our dahlia amateurs and nurserymen. But owing to the late season at which the plants were imported, and the consequent weakness from a three or four weeks' voyage, very few of them have flowered so as to ascertain their real merits. Wheeler's Maria, Maid of Bath, Lady Middleton, Bree's Rosa, and Le Grand Baudine, are all that have afforded fine specimens.

It will be seen that the old favorites, Suffolk Hero, Springfield Rival, Royal Standard, Eva, Dodd's Mary, Duchess of Richmond, Unique, Hope, Rival Sussex, Conductor, and Marquis of Lothian, stand nearly as high as many of the new varieties, the two first appearing in nearly all the finest stands of all the various classes of prizes. This information we hope will induce amateurs to hold on upon these excellent flowers, and not give them up to make place for a new one of whose properties they know nothing, or at least nothing under the effects of our climate, which varies materially the beauty of many kinds, from what we can judge by the number of prizes they have gained in England. Lewisham Rival, which many amateurs, after a trial of two years, are about to give up, seems to have been more successful than any other white flower; this somewhat astonishes us, as we have never been able ourselves, nor have any of our friends, to succeed in securing a perfect specimen, without an eye; it invariably comes hollow. Virgin Queen is thought a better flower by some of our good dahlia judges; but it has not gained scarcely a prize this year. We trust our dahlia growers will give Lewisham Rival a fair trial of another year.

The several societies which offered prizes for SEEDLINGS have been very careful in awarding their premiums. At the Salt Hill, the following is the report in regard to these, which we copy entire:—

FIFTH CLASS.—Seedlings of 1840, (thirty-three entries,) four blooms of each variety. 1. A silver cup, value £5, to Mr. Widnall,

of Cambridge, for Princess Royal, (raised by Mr. Hudson,) a beautiful striking new variety, ground color sulphur tipped with rosy purple, and fine form. 2. Mr. Sparry, Depford, for Conqueror of the Plain, dark maroon, occasionally shaded with purple, unrivalled form, and possessing great depth of petals. 3. Mr. Jeffries, of Ipswich, for Lady Harland, a good useful lilac. 4. Mr. Dodds, of Salisbury, for Fanny Dodds, a fine circular yellow. 5. Mr. Robinson, of Sheffield, for a white tipped with bright crimson, striking; petal a little too large. 6. Mr. Silverlock, of Chichester, for Candidate, a dark purple of good quality. 7. Messrs. Brown, for Marquis of Landdowne, shaded salmon, full sized flower, of great depth. 8. Rev. C. Fawcitt, for Hon. Mrs. Abbott, lilac. 9. Buck & Smith, Islington.

SIXTH CLASS.—Seedlings of 1841, (thirty-six entries,) one bloom of each variety. 1. Silver cup, value £5, to Mr. Turrill, for a dark flower. 2. Messrs. Brown, white, tipped with rose. 3. Mr. Stein, for a dark variety. 4. E. Davis, Bath, for a dark maroon. 5. Mr. Howe, for a promising white. 6 and 7. Messrs. Brown, for two good flowers, one a scarlet and one a rose.

Messrs. Hedley & Sons, Cattlegugh, Wildman, Ansell, Sparry, Gaines, Neville, and others, have also raised seedlings, some of which are said to be very good flowers. The great deception which has been practised in growing seedling dahlias has awakened the attention of floricultural societies to the importance of guarding against such imposition as far as possible, for the future, and we are glad to see that the Caledonian Horticultural Society of Scotland refused to give a single premium, although there were nine competitors for the prize.

From this information, condensed after the laborious task of reading more than fifty quarto pages of the finest type, we trust our dahlia cultivators will be enabled to learn all that they may wish in relation to new dahlias; and careful attention to the above will afford them the means of selecting fine sorts only for planting next season.
—*Ed.*

Exhibition of the London Horticultural Society.—At page 309, we gave some account of the great exhibition of this society at the Chiswick gardens, the 15th of May. The great length to which the report was extended rendered it necessary for us to condense it as much as possible, and omit such as was the least interesting. Believing a similar account of the exhibition of the 10th of July would be read with equal gratification, we have been awaiting an opportunity to give some account of it, but have been prevented for want of room. As we are now bringing the present volume to a close, and as it is mostly devoted to reports, we shall seize the opportunity to present it at this time. We commend the report to all our floral friends: it is a rich treat to peruse; for next to the possession of such fine specimens as are pictured to our minds, is the gratification derived from reading any thing in relation to their great beauty. What will our green-house cultivators say to such specimens of *Lecheanáltsia formósa* as are mentioned below? Will they, after reading this, allow such weak and puny plants as we usually see to find a place in their collections? The same may be said in relation to pe-

largoniums, and, indeed, many other plants which are here named. We trust the perusal of this report will convey a useful lesson to all our cultivators of plants.—*Ed.*

"Of the tribes of showy plants which appeared in the exhibition, the heaths occupied by far the most prominent position. The collections of these from Messrs. Barnes, Butcher, and May, among the amateurs, and Messrs. Young and Jackson, nurserymen, were particularly admirable. Twenty specimens from Mr. Barnes, gardener to G. W. Norman, Esq., attracted universal attention from the immense masses of flowers they individually and unitedly presented, and the great variety of colors and forms thus collected together. The plants otherwise most noticeable were *E. Bowieana*, from Mr. Butcher, gardener to Mrs. Lawrence, Ealing Park, five feet high, and literally loaded with its beautiful white blossoms; *E. ventricosa*, from the same establishment, a complete mass of splendid flowers, *E. ventricosa superba*, contributed by Mr. Green, gardener to Sir Edmund Antrobus, Bart., Cheam, and covered with enormous heads of glowing pink inflorescence; *E. ventricosa purpurea*, more than four feet in height, so dense and bushy as to be capable of concealing a bird's nest in its centre, and bedecked with numberless pretty bluish-colored flowers, tipped with purple, from Mr. Jackson, of Kingston; a pale variety of *E. ventricosa*, four feet high, and almost as remarkable as the last, from the same grower; *E. viridis*, with curious dark-green drooping blooms, and conspicuous from the size and health of the specimen, from Mr. Bruce, gardener to B. Miller, Esq., Mitcham; and *E. eximia* and *E. ampullacea*, from the nursery of Messrs. Lucombe, Pince, & Co., Exeter, which for the spreading character of the plants, and the abundance as well as loveliness of the flowers, deserve the highest praise. Except one collection, of which shabbiness and scantiness of bloom were the chief characteristics, all the heaths present were distinguished for good culture, which comprehends compactness of growth, verdure of foliage, with size, color, and profusion of flowers. In the case of many of the larger plants, the soil was elevated two or three inches in the middle of the pot, though it should be remarked that this was not effected by burying the roots that much deeper in the spot mentioned, but by gradually raising the bases of the entire body of these above the surrounding soil. The earth employed, too, had obviously not been deprived of the fibrous matter it naturally contains, by sifting or any analogous process, for the fibre is very properly thought to be instrumental in keeping the soil open, and permeable by water. Fuchsias, including a considerable number of new hybrids, were the next leading objects of attraction: *F. fulgens* was shown in several states; those of extreme exuberance and unnatural dwarfness, with a stuntedness of growth and yellowness of foliage, being by no means so interesting as the intermediate condition, in which healthy leaves and a great quantity of fully developed flowers were observable; *F. corymbiflora*, with its tall stems, large oblong leaves, and singularly long corymbs of bright crimson flowers, had a very stately aspect, and seems better suited for conservatories than for small green-houses; Mr. Green had a plant of it in his principal collection. *F. formosa elegans* is an extremely pretty variety; it has small leaves, numerous

stems, and an extraordinary profusion of blossoms, which have crimson reflexed sepals and a deep purple corolla; both for habit and flowers it is one of the best kinds now cultivated, and was exhibited in great perfection by Mr. Storey, of Isleworth. *Fuchsia Towardii*, sent by Mr. Standish, of Bagshot, appears to be of common hybrid origin, but is peculiar, from having the sepals and petals colored throughout of a brilliant hue between crimson and carmine. Three new sorts, respectively called *refulgens*, *splendens*, and *triumphans*, came from Mr. Kyle, gardener to R. Barclay, Esq., Leyton; the last was particularly fine, the flowers being very large and long, with sepals of an indescribable carmine tint; a curious variety, of which it would be difficult to give a better notion than is conveyed in the declaration that it was like *F. fulgens*, in an unusually high state of culture, was shown by W. H. Storey, Esq.; the stems, leaves, and flowers, were amazingly large, but otherwise resembling those of *F. fulgens*. From the last named gentleman there was also a hybrid, somewhat allied to *F. Standishii*, which showed to what extent *fuchsias* are influenced by proper treatment; it was about four feet high, and of an equal diameter—the stems, which were absolutely innumerable, being all apparently of this year's production, and so tastefully arranged, as well as so pleasingly sprinkled with blossoms, as to form a very striking group. Another new hybrid, with flowers not unlike those of *F. Chandleri*, but tall, strong, erect stems and larger leaves, was from S. R. Prowse, Esq., Greenwich; the blooms are always axillary, which is not the case with *F. Chandleri*, large specimens generally producing them in some kind of a raceme, with whitish sepals and a red corolla. A specimen of *F. globosa*, trained on a crescent shaped trellis, cannot be approved, as it looks much better when managed as a bush. Other seedling *fuchsias* were exhibited, but they are so closely related to each other, and to sorts already known, that it is unnecessary, were it possible, to offer any description of them. The hint may, however, perhaps be permitted that it would be well to extend the practice of hybridization to the intermixture of the less common forms and colors of *F. excorticata*, *lycioides*, *microphylla*, and *cylindracea*, with the better sorts, by which at least something novel would be obtained. Of the plants brought forward which have pre-eminent claims on the notice of the cultivator, there is a class of low evergreen shrubs, of which several examples will be mentioned. *Lechenaultia formosa* is probably the best illustration of this tribe, and the specimens shown at the two former exhibitions were fully equalled by those of Mr. Barnes, Mr. Green, and other gardeners, on the present occasion. The reader must imagine a depressed cone, two feet in height, wholly encompassing the pot, and composed of velvety-looking scarlet blossoms, dotted here and there with a few green leaves, to gain even the faintest notion of the superlative beauty of these charming little objects, which are not excelled by any thing within the whole range of our knowledge. *Helichrysum pumilum*, though a more diffuse growing plant, with fewer flowers, is scarcely less worthy of esteem; that sent by Mr. Green, gardener to Sir E. Antrobus, Bart., had however, lost most of its interest by the fading of the lively yellow disk. *Helychrisum proliferum*, bearing elegant moss-like leaves, and hand-

some crimson blossoms, was brought, in excellent order, by Mr. Davis, gardener to Sir S. Clarke, Barnet; the specimen was about two feet in height, and admirably grown—and the species ranks among the most ornamental of green-house plants. To *Roellia ciliata*, were it not for the unfortunate tendency of its foliage to a rusty brown cast, the same praise would be awarded. Mr. May, gardener to E. Goodhart, Esq., furnished a very handsome plant of this delightful old species; and there was another in Mr. Green's stand; but although the flowers of both were copious, and of a lovely blue, of various shades, the leaves were not free from the ordinary imperfection. *Statice puberula*, from Mr. Green, and Mr. Smith, gardener to C. Mills, Esq., Hillington, and *S. foliosa*, from Mr. Butcher, merit distinction, as interesting green-house dwarf shrubs, which bloom with such prodigality as frequently to perish in consequence; their pretty blue and white flowers were well expanded on the plants here referred to. *S. arborea*, with its larger leaves, more arboreous nature, and similar blossoms, elevated on a longer stalk, was sent by the Mr. Smith above mentioned, in a healthy and prolific condition. *Rondeletia odorata*, a decidedly valuable inhabitant of our stoves, was seen four feet high, in a bushy and free-flowering state, from Mr. Green. *Solanum Herbertianum*, which flowers almost every month in the year, and has blossoms of the purest purple, banded with yellow, was cultivated in a superior manner by Mr. Butcher. *Crassula coccinea*, exhibiting about twenty clusters of its showy crimson and white blossoms, was also from Mr. Butcher, and reflected the greatest credit on the skill exercised in its cultivation. *Campanula fragilis*, covering a low flattish trellis, that curved slightly downwards, presented a beautiful group of light blue flowers. Being naturally inclined to trail over the ground, the system of treating it was quite appropriate. It was grown by Mr. Marshall, gardener to Mrs. Langley, Kingston. The last of the kind we shall mention is *Gardouquia Hookerii*, which we never before saw in such vigorous health. There were four or five plants from Mr. Barnes, gardener to G. W. Norman, Esq., most of which had a single stem, to three or four inches above the pot, from whence the branches radiated in all directions, some being supported with slender stakes. The graceful little scarlet blossoms were not remarkably abundant, which is possibly attributable to the extra luxuriance of the specimens; these last were, however, peculiarly well cultivated. In the species we have thus been remarking on, there is an evident woodiness and shrubbiness which constitute a marked feature of distinction from those to which we shall now advert, which possess a greater or less degree of succulence, or a truly herbaceous habitude. *Triptilion spinosum*, supposed to be an herbaceous perennial, with deep blue blossoms, came from the gardens of Lady Grenville, Dropmore; Mr. Frost, the gardener there, having succeeded in growing and flowering it for the last two or three years. It is not less noticeable for its beauty, than for the failures that have usually attended attempts to cultivate it. The specimen was in a pot, and the surface of the soil was covered with moss. *Besleria pulchella*, an ornamental old stove herbaceous plant, was shown by Mr. Barnes and Mr. Butcher. It is a rapid growing species, with succulent stems and leaves, the hab-

it of some caulescent gloxinias, and a prodigality of red and yellow flowers. *Gloxinia rubra* came from Mr. Green; and a plant of it, with very dark flowers, from Mr. Mountjoy, of Ealing. The power of the species to remain in bloom a great length of time has been rendered fully obvious by these exhibitions. A noble plant of *G. maxima*, having whitish flowers, with a tinge of blue in the throat, was supplied by Mr. Mountjoy, of Ealing. The same exhibitor brought a specimen of *G. hybrida*, bearing immense deep blue blossoms, in an extremely beautiful condition. From Mrs. Lawrence's gardens, there were some splendid plants of *Cophea Melvilla*, a half-shrubby plant, with a growth similar to the larger salvias, and bunches of scarlet flowers, tipped with green. Grown as these plants were, it is a very interesting object, and thrives well under the treatment given to *Salvia splendens*. This collection comprised, moreover, a plant of the pretty *Xanthosia rotundifolia*, which, with its curious white inflorescence, is rather attractive. An *Hydrangea hortensis*, sent by Mr. Taylor, gardener to — Coster, Esq., Streatham, had a surprisingly large head of flowers. *Trachelium cæruleum* was exhibited by the same person, and whether kept in a pot, or treated as a summer border plant, is always admired for its dense clusters of small blue flowers. *Lisianthus Russellianus*, adorned with two of its superb purple blossoms, and a whitish flowered variety which is more novel than beautiful, were from Mr. Cuthill, of Camberwell. *Dianthus lusitanicus*, a species with many stems, of the height of two feet or upwards, and numberless white blossoms, whose petals are elegantly laciniated, was shown in a pot by Mr. Marshall, gardener to Mrs. Langley, Kingston. Two fine bulbous plants, *Amaryllis vittata* and *Lilium eximium*, will complete our list of the plants composing this division. The first was brought by Mr. Franklin, gardener to Mrs. Prior, Hampstead, and bore two spikes of magnificent red flowers. Six specimens of the last, grown by Mr. Mountjoy, of Ealing, in pots, were three feet high, and had three or four immense white blossoms on the summit of each of their stems. It is a Japan species, allied to *L. longiflorum*, and said to be quite hardy. In a few of the plants exhibited, the forms and strength of tropical vegetation were strikingly manifest. These were from the collection of Mrs. Lawrence, Ealing Park, and included *Hedychium coronarium*; magnificently grown, and crowned with yellowish-white and deliciously sweet scented flowers; a species of *Heliconia*, with rich scarlet bracts, enveloping the various-colored blooms; *Clerodendron speciosissimum*, a species thoroughly distinct from *C. squamatum*, and in extraordinary health; *Poinciana pulcherrima*, with gorgeous orange blossoms, rising from amidst the beautifully pinnated leaves, and conspicuous for superior culture; and *Erythrina Cristagalli*, with larger flowers and of a deeper hue than is commonly seen in specimens grown in even an unrestricted soil. Climbing plants comprised the charming *Gompholobium polymorphum*, most successfully managed by Mr. Barnes, gardener to G. W. Norman, Esq. The stems of this subject were much stronger, and the flowers finer and more liberally produced, than is ordinarily the case. *Manettia cordifolia*, fastened to a large globular trellis, was again shown by Mr. Butcher, in great perfection. A very tall plant of *M. coccinea*,

with larger leaves, and not so many blossoms, was likewise in the specimen tent. *Mandevilla suaveolens*, a new climber, with large, white, fragrant, trumpet-shaped flowers, was in a good flowering state, from Mr. Butcher. It was attached to a cylindrical trellis. *Hoya carnosa*, similarly treated, created a really beautiful display. It came from Mr. Tinsley, gardener to Mrs. Sharpe, Barnet; and though the trellis was only four feet in height, it had a great quantity of its delicate wax-like flowers. This mode of treating so favorite a plant ought to be extensively adopted. *Chironia decussata* is not naturally of a climbing disposition, but trained to a flat upright trellis by Mr. Tinsley, the lateral branches protruded forwards, each bearing their showy pink blooms at the extremity, and making altogether an imposing appearance. *Russelia juncea*, which is rather a trailing than a climbing species, was supported on a high wire trellis, from the top of which its graceful rushlike branches depended. Mr. Green was the exhibitor of this plant, which was more prominent for its verdant beauty than for the profusion of its flowers. We have anew to regret that climbers were not more numerous, and to reiterate our declaration that cultivating them in pots is the easiest as well as the best system of flowering them successfully. A new plant, with a single expanded flower, was exhibited by Mr. Butcher, gardener to Mrs. Lawrence. It was the *Lemonia spectabilis*, a stove shrub, with glossy leaves, and solitary pink blossoms. *Berberis trifoliata*, with extremely elegant, three-parted, holly-like foliage, was sent by Mr. Mountjoy, of Ealing, though not in flower. A species of *Yucca*, not very remote from *Y. filamentosa*, was from Messrs. Brown & Attwell, Uxbridge. *Rosa devoniensis*, which is an improvement on the yellow Noisette, was sent from Messrs. Lucombe, Pince, & Co., its sole possessors. From Mr. Cutbush, of Highgate, there was a seedling *chryseis* (*Eschscholtzia*), with semi-double flowers, the exterior of which is the color of *C. crocea*, while the middle is of a much darker orange. It is a singular example of the propensity of some annual flowers to 'sport,' and most likely can never be perpetuated.

The exhibition of *pelargonia*, though very fine, was not so gorgeous, nor in such perfection, as it was at the former meeting. This probably arose from the varieties selected for exhibition; but, in justice to Mr. Cock, we must not include his collection in this remark, for no perceptible difference was visible in his plants; they were in fine condition and splendid bloom; his plant of *Emily* attracted great admiration, but this, we imagine, arose more from its peculiar color than any other superiority, as *Eliza* superb, *Orange Boven*, *Diadematus* superbum, and *Juliet* (a seedling of Mr. Cock's) were equally well grown. Mr. Upright's plants, though rather small, were well bloomed; the other collections from amateurs contained plants of vigorous growth, but exhibiting a great deficiency of flowers. Mr. Gaines received the first prize in the nurserymen's class; his plants had the advantage of growth and equality of size over Mr. Catleugh's, but *splendidum* and *Alexandrina*, in the latter collection, were quite perfect. Among the large specimens, Mr. Cock's plants were again conspicuous for size and abundance of bloom; *Rienzi* was a magnificent plant. Mr. Catleugh's were compact and admira-

bly grown, but as a collection, it was rendered imperfect by the conservative having lost a great portion of its flowers in its transit to the gardens. Mr. Gaines's three specimens were large, and covered with an equal head of bloom. That portion of the tent appropriated to the seedling pelargoniums was crowded during the whole of the day, furnishing strong evidence of the interest excited by any novelties and improvements in this favorite class. The varieties exhibited were numerous, and among them were flowers of great beauty in form and color; the most attractive were the seedlings from E. Foster, Esq., of Clewer Lodge—they were characterized by an extraordinary stain of rich and brilliant color, quite novel in appearance—two were selected for prizes, being considered fine examples of form. A plant of the Rev. R. Garth's beautiful seedling, the Queen of the Fairies, was exhibited; it appears to be a free bloomer, the truss, which was expanding its flowers, being furnished with nine pips; the precision of the marking in the upper petals is a strong peculiarity, and indicates a great improvement attainable in this portion of the flower; a prize was awarded to it, and another to Wilson's Enchantress, a bold and striking variety. There were other seedlings of great merit exhibited, showing that improvements are going on in all parts in this elegant class of flowers. Strongly impressed with the beauty of these seedlings, and our memory furnishing us with a list of very fine flowers that have of late years been introduced, we cannot but feel that those selected for exhibition do not keep pace with the improvements that have taken place; many of the flowers shown this season should be discarded altogether, and we trust we may bid farewell to the Beauty of Ware, Touchstone, Lady Murray, and others we could mention, as quite unworthy of appearing in a selection, being destitute of the properties which constitute a good flower, and whose only claim to notice consists in the enormous head of bloom they can be produced with; they do not represent the present improved state of this beautiful class, and the preference of such flowers by exhibitors acts as a discouragement to the efforts of those who are engaged in the praiseworthy occupation of improvement. The judges should look to this, and award their prizes to the best sorts if fairly cultivated, in preference to the comparatively worthless kinds. In the large tent, we noticed a collection of twenty pelargoniums from Mr. Catleugh, comprising many of the recently introduced varieties; among them we noticed the Nymph, Witch, Medora, Arabella, Duenna, Jubilee, Wonder, &c.; and a box of cut blooms of the newer sorts looked very brilliant, and attracted many admirers. A collection of cut blooms of seedlings, and good varieties, from Mr. Russell, of Battersea, was shown, but so injudiciously exhibited as to destroy the effect of the flowers; there were several good seedlings, but we fear their merits were overlooked from the circumstance above stated."

At an ordinary meeting in Regent street, Sept. 17th, we find the following report in relation to several grapes which were then exhibited:—

Mr. Roberts sent specimens of six different varieties of grapes, grown on young vines two years planted; and certainly for size, and weight of the bunches, we should think they have never been sur-

passed: a large silver medal was awarded them. The kinds were Cannon Hall Muscat; one bunch weighed 2 lbs. 3 oz., and some of the berries measured $1\frac{1}{4}$ inch in circumference: an extraordinary bunch of the white Nice, which weighed 7 lbs. 12 oz., was not quite ripe, and from its usually being brought to the table in that state, it is little esteemed; when, however, it is well ripened, its berries assume an amber tint, and become high flavored: black Hamburg, black Prince, black Damascus, and black Morocco; a bunch of the first weighing 2 lbs. 5 oz.; of the second, 2 lbs. 15 oz.; of the third, 1 lb. 11 oz.; and of the fourth, 2 lbs. 7 oz. Mr. Stewart had a Banksian certificate given him for his black Hamburg grapes, and a seedling with small round berries. Mr. R. Buck sent a bunch of Cannon Hall Muscat, which weighed 1 lb. 11 oz. The grapes from Mr. Roberts were as fine specimens of cultivation as are ever seen near London, but his Hamburgs wanted color; this defect was avoided in Mr. Stewart's, whose black grapes were as jetty as they ever can be in the brightest and most sunny season. A bunch of Muscat of Alexandria, from A. Brooke, Esq., weighed 1 lb. 12 oz., and was in perfect maturity: a Banksian certificate was awarded for it. (*Gard. Chron.*)

ART. II. *Exhibitions of Horticultural Societies.*

It is with considerable pleasure that we lay before our readers the following reports of the various horticultural exhibitions which have taken place during the present year. No better evidence is wanted, to show how steadily and rapidly a taste for flowers and fruits is becoming more general, and attracting the attention of the public. Our reports embrace accounts of the exhibitions of one or two societies which have never previously held any exhibitions of flowers: we allude to those of the American Institute, and of the Louisville Horticultural Society.

But while the latter societies have held their exhibitions, we regret that others, of which we presented favorable reports last year, are not included among those which now appear below. We are sorry to see any falling off in the old established societies: the interest should be kept up, if possible; for when once it dies away, it is with much difficulty that the zeal of the members can be aroused to vigorous action. The horticultural societies of New York and Baltimore have neither of them held any exhibition during the season.

ESSEX COUNTY NATURAL HISTORY SOCIETY.—During the present season, the Horticultural exhibitions at the Society's hall have gone off with great eclat. The variety of fruits and flowers was not only greater than at prior seasons, but the number of contributors has very much increased. Several new amateurs have entered the field,

and are bestowing great attention to the cultivation of flowers, particularly of the dahlia, or to the growth of choice and delicious fruits.

Ten weekly exhibitions have been held on Wednesday of the respective weeks, and the annual on Tuesday and Wednesday, September 14th and 15th. The hall was also opened on the evening of the 14th of July, for a display of two of those favorite flowers of midnight, silence, and darkness, "the night-blooming cereus," from the green-house of Mr. F. Putnam. About eight hundred species and varieties of plants have been exhibited in flower; one hundred and fifty were natives of our woods and meadows—the others the product of the green-house and of the garden. Of these last, one hundred and twenty were roses, one hundred and twenty dahlias, sixty geraniums, &c., &c. Of two hundred and thirty-three varieties of fruit, one hundred and twenty-two were pears, twenty-eight apples.

This variety of fruits and flowers were contributed by one hundred and twelve individuals, all of whom, with the exception of eight, were residents of this city.

We subjoin a list of the exhibitions, contributors, &c.

Wednesday, June 16th, 1841. Flowers:—From Miss E. L. Pickman, *Pæonia Whittlèji*, *Lupinus polyphyllus*, lilies, &c. Miss M. J. Howard, geraniums, pinks, pæonies, &c. J. Goldthwaite, geraniums, viz., Tam O'Shanter, Gen. Washington, &c., also a fine variety of seedlings of his own raising. F. Putnam, pæonies, viz., Pottsii, Reevesii, Richardsonii, &c.; *Cereus Ackermannii* and speciosus; geraniums, upwards of fifty varieties, as Commemoration, Beauty of Ware, Gem, Conqueror; *Lilium eximium* (in pot, fine;) roses, Noisette de Bourbon, Perpetual white moss, Harrison's yellow, &c.; also bouquets. John C. Lee, fine carnation pinks (several varieties;) bouquets of verbenas, petunia, phlox, &c. John Lewis Russell, roses, red moss, purple Noisette, &c., also bouquets of pinks, pæonies, &c. William P. Richardson, bouquets of roses, columbines, pinks, lilies, &c. F. Lamson, *Calla æthiopica*; also bouquets of roses, geraniums, &c. A. Nichols, Danvers, native plants, several species, as *Arethusa bulbosa*, *Cypripedium acaule*.

Fruits:—From J. F. Allen, strawberries, Keen's Seedling and early Virginia. Globes containing living specimens of several native fishes, viz., *Perea flavescens*, *Pomotis vulgaris*, *Gasterosteus apelles*, *Gasterosteus pungitius*, were presented by A. Nichols and H. Wheatland.

Wednesday, June 23d.—Flowers: From Mrs. J. D. Treadwell, bouquets of lilies, digitalis, roses, &c. Mrs. James Upton, a large bouquet, containing many varieties of sweet William; also roses, pinks, digitalis, &c. Mrs. L. Bowditch, bouquets. Miss M. J. Howard and F. Lamson, roses, pinks, geraniums, &c. E. H. Derby, *Passiflora cærulea* and princeps, *Cactus speciosissimus*, *Hoya carnosa* (in pot,) magnolia, acacia, nymphaea, pansies, &c. William F. Gardner, *Pæonia Reevesii* and fragrans; roses, King of Prussia, and other varieties; lilies, stocks, &c. Jos. S. Cabot, roses, Mobac, Achilles, Mount Vesuvius, Beauté ethereal, Belle Liloise, Harrison's yellow, Cupid, L'Obscurite, La Beauté Eblouissant, Crick's rose,

Fanny Pariessot, Jerusalem, Rivers's George IV., Lady Alice Ford, Duc de Choiseul, Talma nouveau, William IV., Lee's Wellington, Roi de Prusse, Watt's Celestial, Victor Tracy, Cerisette, Domino, Celine, Gen. Thiers, Sibilia Noir, &c.; pæonies—Whittlèji, Réevsii, &c.; *Campánula persiciæfólia* fl. pl., *Delphinium Barlówi* and *grandiflóra*, *Lychnis floscúculi* álbo pléno, *Spiræa japónica*, *Phlóx pilósa* and *suavéolens*, *Pentsiémón ovátum*, *Orobús purpúreus* and *níger*, *Dictámnus álba* and *rúbra*, *Tradescántia virginica* fl. pl., *Clématis Sieböldii*. John C. Lee, carnations, dahlia first of this season, roses, &c. G. D. Phippen, roses, verbenas, *Lyismáchia*, *digitalis*, phlox, pinks. William P. Richardson, centaurea, roses, *digitalis*, phlox, &c. F. Putnam, *Pæónia Húnei*, frágans, &c.; roses, Rivers's George IV., Gloria Mundi, Rosa Mundi, red moss, blush moss, carmine, snowball, &c.; cactus, geraniums, &c. A. Nichols, W. Mack, and H. Whentland, native plants, as *Kálmia latifólia* and *angustifólia*, *Arethúsa ophioglossoides*.

Fruit:—From J. F. Allen, Bishop's orange strawberries. William F. Gardner, pine strawberries. E. H. Derby, May duke cherries. J. C. Lee, strawberries, white wood, Keen's Seedling, Hovey's Seedling (1836;) cherries, variety of Bigarreau.

Wednesday, June 30th.—Flowers:—From Mrs. M. B. Mansfield, *Gladiolus byzantium*, *digitalis*, roses, poppies, pinks. Mrs. L. Bowditch, *digitalis*, *campanula*, roses. Mrs. S. Webb and W. B. Dodge, flowers of the *Magnólia gláuca* under cultivation. F. Lamson, *Eschschóltzia*, roses, geraniums. T. Ropes, Jr., *digitalis*, *pyrethrum*, marigolds, poppies. John C. Lee, *campanula*, *spiræa*. J. Upton, roses, pinks. William Weeks, *delphinium*, *tradescantia*, roses. William F. Gardner, pæonies, verbenas, roses, pinks. C. A. Andrew, *Pæónia Húnei* and others. J. M. Ives, roses, seventeen varieties, of which Fanny Pasard, Bouquet Perfecta, Tuscan, Roslander, &c. W. P. Richardson, *Aconitum*, *reseda*, *digitalis*, roses. F. Putnam, roses, geraniums, &c. J. S. Cabot, roses, twenty-seven varieties, as white Globe, Leopoldine de Napoleon, Duc d'Angoulême, Gen. Blucher, Charles II., Village Maid, new Belgic, King of Rome, Leonore, Belle Violet, Miralba, La Mienne, Queen of Perpetuals, Champion, &c. William Mack, native plants, *Córnus canadénsis*, *Azàlea viscósá*, &c. H. Whentland, *Magnólia gláuca* and *Kálmia latifólia*, from the woods in Gloucester.

Fruit:—From William F. Gardner, Pine strawberries. J. M. Ives, Warren's seedling strawberries; seedling cherry. J. C. Lee, Keen's Seedling and Hovey's Seedling strawberries. J. Upton, white Wood and Pine strawberries.

Wednesday, July 7th.—Flowers:—From Mrs. J. D. Treadwell, bouquets of *spiræa*, honeysuckles, *malva* sp., roses, &c. Mrs. W. Deun, lilies, *lychnis*, *digitalis*, &c. Mrs. N. B. Mansfield, pæonies, *petunias*, *spiræa*, *clematis*, lilies, &c. Mrs. L. Bowditch, *nasturtium*, *pyrethrum*, lilies. J. Goldthwaite, verbenas, *campanulas*, geraniums, pinks. T. Ropes, Jr., *delphiniums*, *chrysanthemums*, poppies. William F. Gardner, lilies, *clematis*, poppies. J. M. Ives, roses, honeysuckles. E. Emerton, lilies, and flowers of *Tília americana*. William P. Richardson, lilies, *lychnis*, *antirrhinum*, pinks, poppies. E. H. Derby, *Nymphæa odoráta*, also the following plants

in pot, *Amaryllis formosissima*, *Lantana camara*, *Melaleuca* sp., *Yucca aloefolia* in full flower, attracting considerable notice, and myrtle orange in fruit. Mrs. S. A. Safford, Cape Jessamine (in pot.) A. Nichols, flowers of *Ailanthus glandulosa*. H. Wheatland, native plants, several species.

Fruit:—From Mrs. L. Bowditch, cherries, black heart. J. M. Ives, cherries, a seedling Bigarreau. William F. Gardner, strawberries, pine. William P. Richardson, black mulberries, and cherries, two varieties. J. F. Allen, grapes, black Hamburg; peaches, Royal George clingstone. The white Bigarreau cherry, by E. Emerton and Jona. Tucker.

Wednesday, July 14.—Flowers: From Mrs. L. Bowditch, *Nerium oleander*, lychnis, lilies, &c. Miss E. Prince, bouquet of lilies, coreopsis, honeysuckles, pinks, &c. William F. Gardner, dahlias, Countess of Mansfield and Napoleon; a beautiful spike of *Yucca filamentosa*; also, carnations, stocks, &c. J. Upton, *Xylosteum* sp., roses, pinks, &c. Jonathan Tucker, bouquets of lychnis, monarda, pyrethum, &c. William Mack, *Hesperis maritima*; also native plants. F. Putnam, *Verbena mestoria*, *Péppers*, *élegans*, *Eyreana*, &c. William P. Richardson, centaurea, lathyrus, verbenas, argemone, &c. G. D. Phippen, celsia, petunia, lychnis, pinks, &c.; also several species of native plants, from Gloucester woods, as *Magnolia*, *Kalmia*, &c.; some of the clusters of the kalmia were beautifully double. A. Nichols and H. Wheatland, native plants, pyrola, *Andromeda*, *Clématis*, &c.

Fruit: From A. Nichols, *Vaccinium*, three species, and *Pyrus ovalis*, (native.) J. Tucker, *Podophyllum peltatum*, under cultivation. W. P. Richardson, currants, red and white; raspberries, white.

Wednesday, July 21.—Flowers: From Mrs. N. B. Mansfield, *Asclepias tuberosa*, clematis, verbascum, carnations, &c. Mrs. L. Bowditch, bouquets. G. H. H. Forrester, poppies. E. Seccomb, clusters of the flowers of *Catalpa syriacifolia*. J. Tucker, coreopsis, centaurea, &c. C. H. Saunders, *Lathyrus odoratus*, several varieties. G. Driver and E. Buswell, dahlias, *Sulphurea elegans*, and Chandler's Magnificent. F. Lamson, verbenas, zinnias, petunias, &c.; also native plants. Miss C. Lee, fine specimens of *Althæa rosea*, fl. pl. lutea. G. D. Phippen, celsia, *œnothera*, *fumaria*, dahlias, &c.; native plants. F. Putnam, dahlia, *Striata formosissima*; verbenas. W. P. Richardson, centaurea, chrysanthemum, lathyrus, &c. H. Wheatland, native plants.

Fruit: From J. C. Lee, grapes, white Chasselas and Frontignac, raspberries, Franconia. J. Tucker, Madeline pears. J. M. Ives, currants, white Dutch, large fruited Missouri, and English black. G. D. Phippen, *Rubus strigosus*, (native.)

Wednesday, July 28.—Flowers: From Mrs. J. D. Treadwell, *Hemerocallis cœrulea*, *lavatera*, *euphorbia*, carnations, &c. Miss C. E. Perkins, a fine plant (in pot,) of *Crassula ramosa* in flower. G. Driver and E. Buswell, dahlias, Countess of Liverpool, *Sulphurea elegans*, *Dennisii*, &c. T. Ropes, Jr., dahlias, Lord Ashburton and *Dennisii*; *Lobelia cardinalis* under cultivation; stocks, poppies, &c. H. K. Oliver, dahlia, Miss Johnstone. J. F. Allen, roses, *Agrippina*, *flageolet*; *Plumbago cœrulea*. F. Lamson, *Hydrangea hortensis*;

cacalia, hibiscus, &c.; also native plants. W. P. Richardson, lobelia, *hemerocallis*, petunia, phlox, &c. J. S. Cabot, *Yucca filamentosa*, *Hemerocallis cœrulea*, *Gentiana catæbœi*; *Aconitum variegatum novum*; *Coreopsis tenuifolia*; *Trachelium bicolor* fl. pl.; *Statice belidifolia*; *Campánula grácilis*.

Fruit:—From E. Emmerton, Scotch gooseberries, six varieties; apples, summer pearmain; pears, Madeline; mulberries, black. W. Waters, pears, summer sugar. Mrs. Taylor, of Danvers, large specimens of *Rubus trivialis*, (native.) Mrs. Weston, apricots. F. Lamson, *Rubus occidentalis*, *trivialis*, and *strigosus*, (native.) J. M. Ives, gooseberries, Scotch, two varieties; pears, Madeline, and Petit Muscat. W. Stearns and W. P. Richardson, Madeline pears. J. F. Allen, cherries, seedling; peaches, Royal George clingstone.

Wednesday, August 4.—Flowers: From Mrs. L. Bowditch, Mrs. J. Hale, G. D. Phippen, Wm. Leavitt, and W. P. Richardson, bouquets. Mrs. Taylor, of Danvers, native plants. Miss E. Prince, bouquets of verbenas, clematis, *hemerocallis*, hibiscus. C. M. Richardson, dahlias, *Romulus*; bouquets. E. B. Peirson, *Zephyranthes atamascœ*, dahlias and bouquets. F. Putnam; *Echinocactus Eyriæi* (in pot.) F. Lamson, bouquets of garden and native plants. H. Wheatland, dahlias, verbenas, *lavatera*, &c.; also native plants. J. Goldthwaite, dahlias, Conqueror of Europe, Golden Sovereign, &c. G. Driver and E. Buswell, dahlias, *Striata formosissima*, *Salamander*, &c.

Fruit:—From Mrs. Taylor, of Danvers, fine and large specimens of *Vaccinium resinosum*, *virgatum*, and *frondosum* (natives.) Miss E. Prince, red Juneating apples. J. C. Lee, Petit Muscat pears; *Franconia* raspberries. W. P. Richardson, Scotch gooseberries; red and white currants. H. Wheatland, Beauty of Summer pears. W. Stearns, Jargonelle and Beauty of Summer pears; red Juneating apples. G. Driver, green Citron melons.

The exhibition of two rare and beautiful varieties of pigeons, by W. C. Barton, excited much interest and attraction.

Wednesday, August 25th.—Flowers: From Mrs. R. Wheatland, *Melocactus* sp. (in pot,) from Pernambuco. G. Masury, of Beverly, *Verbena Péppers*, and *teucroides*; dahlias, several varieties, as Mrs. Rushton, Lady Arabella; bouquets. Charles Hoffman, *Agapanthus* sp. (in pot;) bouquets of verbenas, heliotrope, phlox, &c. J. Goldthwaite, dahlias, Suffolk Hero, Beauty of Bedford, &c. W. F. Gardner, dahlias, Conqueror of Europe, Mrs. Rushton, &c.; stocks. F. Lamson, bouquets, and several species of native plants. J. M. Ives, lilies, stocks. G. D. Phippen, balsamines and nasturtiums. J. C. Lee, dahlias. W. P. Richardson, bouquets of dahlias, lilies, &c. F. Putnam, *Gladiolus floribundus*; dahlias, Fire-ball, Ansell's Unique, Red Rover, &c. H. Wheatland, *gladiolus*, verbenas, dahlias; also native plants.

Fruit:—From J. C. Lee, pears, Dearborn's seedling, Vallee Franche, Julianne of Coxe, Bon Chrétien Fondante, and English red Cheek; Zinfindal and black Hamburg grapes; pine-apple melons. Charles Hoffman, several varieties of fine pears. W. F. Gardner, Royal George peaches. J. M. Ives, pears, Bartlett, Julianne from France, Julianne of Coxe, Williams's double flowering, Summer Frank Real;

apples, early Bow, and a seedling crab. W. Stearns, pears, summer Franc Real, Empress of Summer, Orange; red Juneating apples. W. P. Richardson, seedling cherries of good flavor, and desirable for their lateness; Prince's Imperial gage. G. Driver and E. Buswell, pine-apple and green citron melons. Humphrey Cook, specimens of a variety of bean (*Dólichos*.) remarkable for the length of its pod, which is nearly three feet.

Annual Exhibition.—On Tuesday and Wednesday, Sept. 14th and 15th, the hall was opened for a display of the offerings of Flora and Pomona. Wreaths of evergreens were hung in festoons on the sides of the hall, and diagonally across the ceiling. Three arches were erected, bearing appropriate inscriptions; the pillars which supported them were entwined with evergreens, ornamented with flowers of varied hue. A cut glass chandelier, suspended from the centre of the ceiling, was decorated with wreaths, and dahlias of different colors; beneath was a stand covered with dahlias, which formed a complete pyramid of this gorgeous and showy flower of autumn: a circular table, laden with delicious fruit, viz., figs, grapes, peaches, &c., was placed around the stand. Tables and stands were arranged on the sides of the hall, covered with fruit of infinite variety, and flowers of every hue and color. Several pot plants, peculiar either for their foliage, flowers, or fruit, were placed in different parts of the hall, thus adding much to the beauty and effect of the general arrangement.

The number of contributors was great. Numerous visitors were present during the two days of the exhibition, who appeared to be highly gratified with the rich display of fruits and flowers there exhibited.

Cut Flowers:—From S. C. Phillips, dahlias, Mrs. Rushton, Napoleon; bouquets of verbenas, zinnias, asters, &c. E. B. Peirson, *Sálvia splendens*, *Crócus autumnalis*, and bouquets. G. Masury, of Beverly, dahlias, twenty varieties, *Striata formosissima*, Mrs. Rushton, Douglas Glory, Blandina, Ansel's Unique, Lilac Perfection, Bowman's Premier, Rose Incomparable, Scarlet Perfection, Princess Victoria, &c.; *Gladiolus natalensis*. J. C. Lee, bouquets of dahlias, asters, verbenas, &c. J. W. Downing, dahlias, marigolds, asters. F. Lamson, dahlias, Salamander, Rising Sun, &c.; bouquets; also native plants. Mrs. Hammond, dahlias; fine specimen of double Spanish sun-flower. E. H. Derby, many bouquets, some large and beautiful, of *hemerocallis*, *agapanthus*, *gladiolus*, dahlias, asters, roses, &c. J. F. Allen, a lovely group of fine Chinese roses, of which London superb, blush Tea, Triumph of Luxembourg, Louis Philippe, Flageolet, yellow Tea, Agrippina. William Weeks, dahlias, Countess of Liverpool, *Striata formosissima*, &c.; bouquets. Charles Hoffman, bouquets of asters, dahlias, &c. Miss E. B. Dodge, Elfin Glen, *Ipomœa luteola*, dahlias, *gladiolus*, asters. Mrs. N. Silsbee and Miss G. Silsbee, dahlias, Cedo Nulli, Dennisii, &c.; also bouquets of *hemerocallis*, *gladiolus*, &c. Mrs. N. B. Mansfield, Mrs. Newcomb, Miss R. S. Ives, bouquets of dahlias, stocks, asters, &c. N. Nichols, dahlias, Mrs. Rushton, Countess of Liverpool, scarlet Perfection. F. Putnam, dahlias, about sixty varieties, Fireball, *Striata formosissima*, Marshal Soult, Suffolk Hero, Ansell's

Unique, Beauty of West Riding, Hedley's Perfection, Calliope, Horticulturalist, Beauty of Dulwich, Oxford Rival, Coronation, Stone's yellow Perfection; asters, gladiolus, &c. J. Goldthwaite, dahlias, about fifteen varieties, Suffolk Hero, Conqueror, Rising Sun, Sir Henry Fletcher, Salamander, Diana. W. F. Gardner, dahlias, Mrs. Rushton, Napoleon, Rising Sun; also bouquets. G. D. Phippen, dahlias, Helen of Troy, Paragon, Mrs. Wilkinson, Premier; bouquets. J. H. Phippen, dahlias, Beauty of the North, Sunbury Hero, Lord Ashburton, Salamander. Mrs. B. Upton, dahlias, Mrs. Rushton, Queen of Yellows. H. K. Oliver, dahlias, many varieties, Virgin Queen, Ansell's Unique, Suffolk Hero, Ovid, Canute, Charles XII., Colossus, Marshal Soult. J. Upton, dahlias, Princess Victoria, Rubra pleno, &c.; Gladiolus natalensis. H. Wheatland, dahlias, Rienzi, Warminster Rival, Rosa superba, Isabella, Mrs. Rushton; also bouquets. W. P. Richardson, dahlias, Striata formosissima, Beauty of Bedford, Lavinia; also bouquets. Miss E. L. Pickman, Miss E. C. Mack, Miss E. Prince, bouquets of dahlias, asters, larkspurs, &c. Miss Hobart, double quilled asters. H. F. King, dahlias, Mrs. Rushton, Napoleon, &c.; also gladiolus and bouquets. James Cruickshanks, dahlias, and bouquets of verbenas, asters, &c. Jos. Pulsifer, O. Thayer, Mrs. R. Putnam, dahlias and bouquets. John Lewis Russell, of Chelmsford, dahlias, several kinds; *Thunbergia alata aurantiaca*; seedling petunias, Chinese pinks, &c. T. Ropes, Jr., dahlias, fifteen varieties, Striata formosissima, Sulphurea elegans, Mrs. Rushton, Salamander, &c.; bouquets. G. Driver and E. Buswell, dahlias, twenty-five varieties, Black Hawk, Striata formosissima, Salamander, Countess of Liverpool, Rising Sun, &c.; bouquets. J. S. Cabot, *Lychnis Bungeana*, dahlias, phloxes and herbaceous plants. Washington Vary, *Actæa alba*, (native in fruit.)

Pot Plants:—From E. H. Derby, *Valldia purpurea*, *Begonia rubra*, *Agave americana*, *Gloxinia maculata*, *Cassia tora*, &c.; orange tree and orange myrtle in fruit. J. F. Allen, *Plumbago cœrulea*, and several other varieties of green-house plants. Mrs. L. Bowditch, spotted leaved japonica. W. P. Richardson, *Melœa Azedarack*; J. Goldthwaite, *Fuchsia globosa*. G. Driver, *Araucaria excelsa*, or Norfolk Island Pine, of great beauty. John Prince, Jr., cypress from Cuba, beautiful. H. K. Oliver, tuberose. E. P. Dodge, Elfin Glen, cotton plant of South Carolina, in flower. John Lewis Russell, Chelmsford, *Aræia lophantha*, from seed boiled ten minutes!

Fruits:—From E. H. Derby, apples, four varieties; pears; also peaches grown on walls, Royal George clingstone, very fine specimens. W. P. Richardson, pears, Broca's Bergamot, Washington, brown Beurré, St. Michael, Rousselet de Rheims, orange and summer Bon Chrétien; apples, Ribstone pippin, and two varieties, names unknown; Spanish filbert; peaches, white Melacaton, and a clingstone unknown; grapes, white Chasselas. J. B. Osgood, pears, Bleeker's Meadow, Napoleon, Seckel (very large,) Wilkinson, Coffin's Virgalieu; apples, Osgood's Favorite. E. Buswell, apples, Ribstone pippin, Kilham Hill, Good Minister. G. Masury, of Beverly, Williams's Bon Chrétien, or Bartlett pears; orange quinces. Mrs. A. Dunlap, Bon Chrétien d'ete pears.

From B. Balch, apples, very large, resembling the Monstrous pip-

pin. N. B. Mansfield, pears, Bartlett, and other varieties; Menagerie apples; peaches, large and fine. W. Leavitt, Isabella grapes. C. F. Putnam, apples; melons, water, citron, and nutmeg. J. Prince, Jr., pears, St. Michael, Rousselet de Rheims, Doyenne Gria, Williams's Bon Chrétien; grapes, sweetwater, Isabella, and black cluster. O. Jones, Orange pears. W. Stearns, pears, Easter eu ré, Bishop's Thumb, Rousselet de Rheims, brown Beurré, Napoleon, Bon Chrétien, St. Michael, Summer Thorn, Ronville, Orange, Chelmsford, Bartlett, Seckel, Murphy; apples, red Juneating, Baldwin, Crab, Monstrous pippin; orange quinces. S. E. Peabody, Ronville pears. Mrs. R. Savory, St. Michael and Orange pears.

From B. H. Silsbee, pears, Bishop's Thumb, Rousselet de Rheims, Harvard, St. Michael, brown Beurré, Bartlett, Monsieur Jean. A. L. Pierson, Bartlett pears. G. Driver, Fall Harvey apples. J. S. Cabot, pears, thirty-one varieties, viz., Maria Louise nova, Hannah, Jalousie, St. Ghislain, Washington, Cabot's seedling, Cushing, Roi de Wurtemberg, Williams's Bon Chrétien, autumn Bergamot, Gendelin, Bonne Louise of Jersey, Capiaumont, Belle et Bonne, Wilkinson, Louis, Wilbur, Smith's Pennsylvania, Bon Chrétien fondante, golden Beurré of Bilboa, Gibson, Urbaniste, Beurré Diel, Fulton, Poire d'Amour, Maria Louisa, Coffin's Virgoulouse, St. Michael, Auratte, Hericart, Copaca.

R. Manning, pears, thirty-seven varieties, viz., Jalousie, Belle et Bonne, Cabot, Swiss Bergamot, Henry, Queen of the Low Countries, King Edward, golden Beurré of Bilboa, Epine d'ete, Foster's St. Michael, Beurré Bronze, McLaughlin, Comte de Michaux, great Citron pear of Bohemia, Parmentier, Fig extra from Van Mons, Charles of Austria, Washington, Comte de Lamy, Urbaniste, Alpha, Wilkinson, Wilbur, green Yair, Maria Louise, Belle of Flanders, Dearborn from Van Mons, Bon Parent, Long green, Glout Morceau, Beurré d'Amalis, Long green of Autumn, Monsieur le Cure, Fulton, Johannot, Naumkeag, Bezi de la Motte; apples, Gravenstein, Rambour Franc, Superb sweet, Boxford, Pennock's red winter Sweet, Ribston pippin, Lyscom, Fall pippin. E. Emmerton, pears, twenty-three varieties, viz., Seckel (very extra large specimens,) St. Michael, Surpasse Virgoulouse, golden Beurré of Bilboa, Roi de Wurtemberg, Henry IV., Cap'sheaf, Broca's Bergamot, Marie Louise, Urbaniste, Dearborn's seedling, Julianne, Glout Morceau, Bishop's Thumb, Prince's St. Germain, Bonne Louise, winter Nelis, Beurré Diel, Princess d'Orange, Washington, Easter Beurré; Drap d'Or apples.

J. M. Ives, pears, twenty-three varieties, viz., Duchess d'Angoulême, St. Michael, brown Beurré, Capiaumont, black-seeded Beurré (resembling the Urbaniste in form and flavor,) green Sugar, Belle Lucrative, Buffum, Harvard, Calabash, Bartlett, Cushing, Cabot, Andrews, Seckel, Rousselet de Rheims, Josephine, Princess of Orange, Bergamot du Pasque, Napoleon, Bleeker's Meadow, Beurré Bosc; plums, violet Perdrigon, Cruger's seedling (troubled less by the curculio than other varieties,) Sharp's Emperor, Princess Imperial, Jenkinson's Imperial, blue Imperatrice. Miss R. S. Ives, a basket containing several varieties of plums, pears, &c. J. Bowker, Bartlett pears; Isabella grapes. P. Dodge, Elfin Glen, pears, Na-

poison, Wurtemberg, and Bartlett; grapes, Hamburg, Sweetwater, and Zinfandel; peaches; golden-fleshed, and netted cantelopes. W. F. Gardner, Passe Colmar pears, (second crop;) black Hamburg grapes; peaches, early Royal George, and other varieties.

From J. F. Allen, pears, St. Michael, Seckel, Cabot, and Bonne Louise de Jersey; grapes, Chasselas, Constantia, black Hamburg, Bansaurable; figs; Jacques rareripe peaches, from a tree in pot bearing eighteen such. W. Dean, Bartlett pears; grapes, black and white Hamburg, white Frontignac. B. W. Stone, seedling peaches, two varieties, very fine. Mrs. Weston, several varieties apples. J. Whitney, of Danvers, fine peaches, viz., early red Rareripe, yellow fleshed Rareripe, and Noblesse. J. Pickering, Jr., St. Michael pears. E. Burley, of Beverly, Drap d'Or apples. S. C. Phillips, pears, Seckel, and other varieties; two varieties plums. John Lewis Russell, of Chelmsford, apples, an old orchard variety, Orange sweeting, Spaulding; Chelmsford and St. Michael pears. W. A. Lander, pears, Gansell's Bergamot, Bartlett, Bon Chrétien, Two-eyed. J. Goldthwaite, netted and citron melons. Samuel Webb, green-fleshed Pine-apple melons. G. D. Phippen, green-fleshed Minorca melons. W. Sargent, Kilham Hill and Lyscom apples.

From G. Brown, of Beverly, pears, Seckel, Bartlett, &c.; apples, Pomme d'Api, Drap d'Or; Harrison nectarine, a seedling. Mrs. E. Lander, pears, twelve varieties, viz., Chelmsford, Chaumontelle, St. Germain, St. Michael, Catillac, &c., apples, seven varieties, fall Harvey, Ribston pippin, &c.; nectarines; peaches, Snow, Lemon, and a seedling clingstone. J. Dalton, native grapes, under cultivation. J. C. Lee, pears, Bartlett, Long green or Mouthwater, Gore's Heathcot, Duchess d'Angouleme, Seckel, winter Orange; Ribston pippin apples; peaches, yellow-fleshed and other varieties; grapes, red, white and purple Chasselas, black Hamburg, Zinfandel, native (*Vitis labrusca*); large water-melons, (seed from South America.)

Vegetables:—From N. Frye, Fig tomatoes. S. Holman, Jr., fine purple Egg, (large.) Miss J. Ward, tomato, very large variety. J. M. Ives, rice corn. J. Goldthwaite, Turnip, Blood, and Silesian sugar beets: white Silesian carrots. J. C. Lee, okra; Silesian sugar beets; large pumpkin or squash, weight one hundred and nineteen pounds, seed from Indiana. P. Dodge, Elfin Glen, Mangel Wurtzel, and Turnip blood beets; white Silesian carrots. C. H. Dodge, Elfin Glen, sweet potato of South Carolina, growing in a pot. Mrs. E. Lander, Mexican corn; each kernel is enveloped in a husk peculiarly its own. Lyman Mason, of Marblehead, large Scotch Drum-head cabbage, weight nineteen and a half pounds.

Several species of birds, as *Fringilla canariensis*, *Turdus polyglottus*, *Icterus agripennis*, were exhibited by G. P. Farrington. The singing of these lively denizens of the air added much to the interest of the exhibition.

Wednesday, Sept. 29.—The closing exhibition of fruits and flowers, this season, took place this day.

The display of dahlias was beautiful; they were contributed by F. Putnam, T. Roper, Jr., G. Driver, E. Buswell, W. F. Gardner, J. Goldthwaite, G. D. Phippen, J. H. Phippen, W. P. Richardson, F. Lamson, and H. Wheatland.

James Cruikshanks presented an obelisk, covered with dahlia, which made a fine appearance.

Bouquets from J. C. Lee, W. P. Richardson, F. Lamson, and H. Wheatland.

The fruit was good, some of the specimens very fine.

From Mrs. Churchill, Loug green pears. Mrs. G. Choate, tomato figs. J. C. Lee, pears, Bon Louis d'Avranche, Lodge, Easter Beurré, Bezi Vaet, Beurré Bronze; peaches; grapes, white and purple Chasselas, black Hamburg. E. Emmerton, pears, Beurré Diel, Glout Morceau, Princess d'Orange, St. Michael, Henry IV., Surpasse Virgoulouse, Seckel, Capsheaf, Prince's St. Germain; pear quince. N. Silsbee, Jr., pears, Heathcot, Bezi Frontignac, Josephine, Beurré Diel; Brumfield nectarines. J. Upton, Isabella grapes. J. Farnum, Jr., St. Michael pears. R. Brookhouse, Jr., watermelons. D. Kimball, apples. W. Stearns, pears, Long green, Good Christian, Rousselet de Rheims, St. Germain, St. Michael, winter Nelis, Napoleon, Endicott, Chaumontelle, brown Beurré; Lemon clingstone peaches; damsons. George Choate, St. Michael pears.

The cold and bleak winds of autumn, the fall of the leaf, the harvesting the matured fruits and yellow corn, tell us that the season is fast drawing to a close, and that nature is about to enter into that rest, from which, at the approach of spring, she will awaken with renewed and invigorated life. With these indications our exhibitions close, only, however, for a season, and we trust that when the fields are again bedecked with their mantle of green, chequered with the opening flowers, our halls will be reopened, and that the same spirit which animated us the past season will continue to incite us to new and increased exertions.—*W.*

EXHIBITION OF THE AMERICAN INSTITUTE, NEW YORK.—The thirteenth annual exhibition of the American Institute was opened on the 13th October, at Niblo's Garden; there was an exhibition of horticultural and floricultural products. The exhibition was very well got up, under the arrangement of our correspondent, Mr. Dunlap, who has associated himself with Mr. Niblo in the management of the garden: there was an excellent display of flowers and fruits. Mr. Dunlap has kindly furnished us with the following award of premiums which were offered for the occasion.

Flowers:—John B. Mantelle, Forty-sixth Street, for the best bouquet, a silver medal. Alfred Bridgman, Broadway, for the second best bouquet, a diploma. Niblo & Dunlap, 576 Broadway, for the best twelve self-colored dahlias, a copy of Downing's Rural Architecture. John Briell, Harsimus, N. J., for the second best twelve self-colored dahlias, a diploma. Niblo & Dunlap, 576 Broadway, for the best twelve various colored dahlias, a silver medal. John Briell, Harsimus, N. J., for the second best colored dahlias, a diploma. William Kent, Brooklyn, for the best six self-colored dahlias, a silver medal. Moses Van Beuren, Brooklyn, for the second best self-colored dahlias—For the best six various colored dahlias, a silver medal. Thomas Hogg, Twenty-second Street and Broadway, for fifty-three varieties of the cactus.

Fruits:—William Niblo, 576 Broadway, for the best and greatest display of tropical fruit, a copy of Downing's Rural Architecture. Joseph Monk, Third Avenue, near Thirty-first Street, for the best foreign grapes in pots, twelve varieties, a silver medal. E. Holbrook, Hyde Park, for the best specimen of Isabella grapes, a diploma. R. T. Underhill, Croton Point, N. Y., for the best Catawba grapes, a diploma. John B. Mantelle, Forty-sixth Street, for the best and greatest exhibit of pears, forty varieties, a silver medal. — Andrews, for the second best exhibit of pears, a diploma. William Niblo, 576 Broadway, for the best and greatest exhibit of apples, a silver medal. P. A. H. Ross, Third Avenue and Sixteenth Street, for a specimen of table apples, a diploma. By a lady, One Hundred and Twentieth Street, Harlem river, for two large Lady apples, fourteen ounces, and nineteen and a half ounces, a diploma. W. H. Aspinwall, Staten Island, (G. D. Maroney, gardener,) for the best twelve apple quinces, a diploma. William Kent, Brooklyn, L. I., for two superior quinces, a copy of Bridgman's Florist's Guide. Joseph E. Ehling, for a jar of preserved quinces, a diploma. Sullivan Bates, Bellingham, Mass., for superior specimen of cultivated cranberries, a diploma.

Vegetables:—Nicholas Wyckoff, Bushwick, L. I., for the best winter pumpkin, copy of Bridgman's Gardener's Assistant. W. H. Aspinwall, Staten Island, for the best winter pumpkins, (twelve weighed, on an average, ninety pounds each,) copy of Bridgman's Gardener's Assistant. Mrs. Mary Craven, Newtown, L. I., for an extra large pumpkin, weight one hundred and forty-three pounds, copy of Bridgman's Gardener's Assistant. J. Yeomans, Bull's Ferry, for the second best pumpkin for cattle, copy of Bridgman's Gardener's Assistant. A lady in Frankfort Street, for a superior specimen of preserved pear-shaped tomatoes, a diploma. William Dunlap, Harlem, N. Y., for the best turnip, a diploma. W. H. Aspinwall, Staten Island, (G. D. Maroney, gardener,) for the best carrots, a diploma. E. Holbrook, Hyde Park, for the best parsnips, a diploma. Mrs. Benlow, Bloomingdale, N. Y., for the best blood beets, a diploma. John Briell, Harsimus, N. J., for the best sugar beets, a diploma. A. V. Backer, Manhattanville, for a Valparaiso squash, a diploma. E. Holbrook, Hyde Park, for specimens of Bell neck squash, a diploma. Theophilus Russell, corner of Twenty-second Street and Third Avenue, for a fine specimen of Smyrna squash, a diploma. John Briell, Harsimus, N. J., for the best specimen of solid celery, a copy of Downing's Rural Architecture. S. A. Willoughby, Brooklyn, L. I., for the second best celery, a diploma. Peter Hulst, farmer to Lambert Wyckoff, Esq., Bushwick, L. I., for the best winter cabbage, a silver medal. W. H. Aspinwall, Staten Island, (G. D. Maroney, gardener,) for the best mangel wurtzel, a diploma. Thomas Addis Emmet, New York, for the best purple Egg plants, a diploma. Dr. Bolles, Harris's Island, Conn., for the best specimen of seedling potatoes, (Bolles's seedling,) copy of Bridgman's Gardener's Assistant. W. Hughes, Gowanus, L. I., for the best Mercer and pink eye potatoes, a diploma. Joseph Monk, Third Avenue and Thirty-first Street, nineteen pots grapes; a silver medal.

Liberal contributions of cut flowers were furnished by Richard F.

Carman, Esq., New York, Samuel Bradhurst, Esq., New York, J. P. Nesmith, Esq., Staten Island, S. A. Willoughby, Esq., Brooklyn, Mr. William Reid, Murray Hill, Mr. Briell, Jersey City, and Mrs. Benlow, Bloomingdale.

Niblo & Dunlap, 576 Broadway, one thousand dahlias, and a wreath containing five hundred. Dahlias from Mr. Geo. C. Thornburn, Mr. Michael Floy, Harlem, Mr. Thomas Hogg. From Niblo & Dunlap, two dozen green and hot-house plants.

Several prizes were awarded for the best specimens of oats, corn, &c. Want of room compels us to omit this part of the report — *T. D.*

FOURTH ANNUAL EXHIBITION OF THE BURLINGTON LYCEUM.—The fourth annual horticultural exhibition of the Burlington Lyceum was held on the 29th and 30th of September.

Premiums were awarded as follows:—

For grapes, (foreign,) white Muscat, of Alexandria, (grown under glass,) to Richard S. Field, of Princeton, N. J.

For grapes, (native,) Catawba, to Benjamin Gannett.

For pears, (Holland Green,) to Charles Kinsey.

For peaches, (Rodman's red crimson,) to Richard S. Field.

For apples, (Rhode Island greening,) to George B. Deacon.

For quinces, (orange,) to Adam Price.

For plums, (Fall copper, or October Gage,) to William W. Miller.

For watermelons, (Spanish,) to Joseph E. Scott.

For potatoes, (walnut-leaved kidney,) to John Roydhouse.

For sweet potatoes, (yellow,) to Matthew Ivory.

For dahlias, (twenty varieties,) to Thomas Hancock.

For best bouquet, to Mrs. Henry C. Carey.

For second best bouquets, to Miss Ann Cox.

For best pyramid, to Nathan Holman.

For second best pyramid, to Thomas Brickett.

For celery, to David Pierce.

For egg plants, to Joseph Parrish.

For two best lemon trees, in fruit, to Charles Kinsey.

For two best orange trees, in fruit, to Miss Amelia Smith.

For best display of fruit, to John Roberts.

For best display of vegetables, to Adam Price.

For best display of flowers, to William McKee, jr.

The fruits exhibited were remarkably fine, and the specimens numerous, viz., grapes, pears, peaches, apples, plums, quinces, figs, lemons, limes, oranges, pomegranates, melons, &c. From R. S. Field, B. Gannett, C. Kinsey, G. B. Deacon, W. W. Miller, A. Price, J. Roberts, Miss Amelia Smith, Miss Jane B. Smith, Miss Ann Cox, Mrs. Susan V. Bradford, Mrs. Susan J. Smith, Caleb R. Smith, W. McKee, Jr., J. Parrish, R. H. Morris, T. Hancock, J. S. Kimble, T. Dutton, P. S. Bunting, B. C. Rockhill, N. Colman, J. Askew, F. Brown, G. Gaskill, J. Goldy, W. W. King, R. M. Bishop, J. Rakestraw, J. P. Lowden, D. Allen, R. Grubb, C. Ellis, M. D., S. R. W. Aheull, J. E. Scott, J. M. Lawrie, J. Buckman, S. Stockton, and others.

Samuel C. Thornton, M. D., some large clusters of black Hamburg grapes, from a vine only two years from the cutting grown in the open air.

We were pleased to notice the increased variety and number of vegetables, compared with our former exhibitions, viz: corn (green and ripe,) potatoes, beets, squashes, peas, beans, tomatoes, carrots, cabbage, okra, rhubarb, onions, egg plants, lettuce, &c.

From David Pierce, gardener at St. Mary's Hall. T. Barwell, gardener to Susan V. Bradford. D. McCrone, gardener to Bishop Doane. J. McCoy, gardener to Joseph Askew. Capt. F. Engle, U. S. N. From A. Price; W. McKee, Jr.; D. Allen; B. Tague; Mrs. R. Chester; Joseph Parrish; J. Langstaff, J. E. Scott; W. Allen, R. Grubb; N. E. Lippencott; T. Hancock; P. S. Bunting; B. Taylor, John Parrish, P. H. Ellis, M. Ivory, and others.

The collection of hot-house and green-house plants, pyramids, and bouquets of flowers, were very creditable to the contributors, among whom were W. McKee, Jr., T. Hancock, Bishop Doane, Mrs. H. C. Carey, Mrs. R. Chester, Mrs. A. W. Burns, Mrs. S. V. Bradford, S. R. Wetherill, D. Allen, Miss Amelia Smith, Miss Mary Costill, Ann Eliza Wetherill, W. Allen, C. Kinsey, Miss Ann Cox, Miss Susan Miller, J. P. Firing, S. W. Earl, Miss Caroline Watson, T. Dugdale, Mrs. Clark, of Mount Holly, Mrs. L. Bullock and others, Messrs. Joseph E. Scott and Benjamin Tague, by their noble specimens of melons, sweet potatoes and onions, raised from seed, (a rarity in our latitude,) gave evidence of their superior skill as cultivators.

Honey: some very superior honey from John Mitchell and Joseph Sholl.

The exhibition was fine, notwithstanding the unfavorableness of the season, surpassing any former one. The fruits were excellent, and in fine condition, as were also the vegetables. There were many new and rare plants exhibited, and the hall was decorated in a most superb manner.

The exhibition gave general satisfaction; indeed, there appeared to be but one opinion, which was of universal praise.—*Thomas Hancock, Cor. Sec., Burlington, Oct. 2, 1841.*

HORTICULTURAL EXHIBITION AT SYRACUSE, N. Y.—The Cattle Show and Fair of the New York State Agricultural Society was held at Syracuse, N. Y., on the 29th and 30th of September. There was a good exhibition of stock, farming implements, &c., and an excellent display of flowers and fruit. There was a great gathering of the farmers of the State, and the whole passed off to the satisfaction of all. The following is the report of the judges awarding premiums on horticultural and floricultural products:—

Premiums of books on horticulture were awarded to

David Thomas, of Aurora, for a lot of about forty varieties of apples, pears, peaches, plums, and grapes, some of them of new and valuable varieties, presented by J. J. Thomas, nurseryman, of Macedon.

Dr. Beaumont, of Lyons, for several baskets of very fine and excellent grapes, including the grey Tokay, golden Chasselas, Scuppernong, purple Royal Chasselas, Isabella and sweetwater, the quality of which the Society had an opportunity of testing at the dinner table, "in committee of the whole."

Samuel Hecox, of Lyons, for a lot of sixteen varieties of foreign

and domestic grapes, very fine and well ripened, of which Mr. Hecox raised above fifty bushels the present season.

James Wilson, nurseryman, of Albany, for a beautiful bouquet, and a large lot of dahlias of splendid varieties.

William P. Buell, of Albany, for a miniature parterre of dahlias, of very perfect and well chosen varieties of great beauty, and twenty-one kinds of well selected varieties of apples of fine growth.

Ezra Cornell, of Ithaca, for a basket of fine red cheek melacaton peaches, some of them measuring more than seven inches in circumference.

James Cochrane, of Oswego, for a basket of foreign varieties of grapes, among which were the Chasselas, sweetwater, Frontignac, and Pinou Noire, a hardly variety with a vinous and pleasant fruit; also a basket of silver clingstone peaches.

Mr. Wiltse, of Oswego county, for a basket of fine apples, of known varieties.

J. F. Osborn, of Port Byron, for twenty-nine varieties of cultivated apples, of well selected sorts, together with three varieties of pears.

Mr. Cossett, of Onondaga, for a basket of fine grapes, including the Isabella, Alexander, Munier, and sweetwater, well ripened, and large growth.

Mr. Huntington, of Onondaga, presented a large basket of apples, of beautiful form and fine flavor.

M. B. Bateham, proprietor of the Rochester seed store, presented two seven-year pumpkins, raised by H. N. Langworthy, of Irondequoit, in 1837 and 1840.

John Richards presented the vine and products of one seed of the citron watermelon, amounting to eighteen in number, and weighing over three hundred pounds. (*New Genesee Farmer.*)

LOUISVILLE AND JEFFERSON COUNTY HORTICULTURAL SOCIETY.—The autumnal exhibition of the Louisville and Jefferson County Horticultural Society took place at the Washington Hall, in this city, on Friday, September 24th, when the exhibition was such as to produce a general impression in favor of the soil and climate of this county and city for the general purposes of horticulture, and that at least a part of the members of the Society have used great zeal and exertion in promoting the objects of the Society; yet it is much to be desired that a more decided co-operation of many of the farmers and gardeners should take place, to aid the Society in their highly deserving efforts. It is to be regretted that the exhibition did not last longer than a day and a night, as many persons had postponed visiting it, supposing it would continue at least two days. The rooms in which the exhibition took place were admirably adapted to display the exotics, with their beautiful flowers and fruits, and the indigenous plants and fruits, and the gorgeous bouquets, to the best advantage; being large and lofty, and brilliantly lit up with gas. The tables were tastefully arranged by a committee of ladies, (to whom the Society should feel under particular obligations,) and exhibited a most graceful intermixture of fruits with the richest bouquets.

The society appointed three gentlemen, Dr. Short, Dr. Jarvis, and Dr. Johnston, to award the different premiums.

The following report is from said committee:—

For the six best dahlias, viz., *Tippecanoe*, Duke of Bedford, Mrs. Rushton, Magician, Maid of Judah, and *Sulphurea elegans*, first premium, Edward D. Hobbs.

For the six second best, *Duchess of Sutherland*, *Striata formosissima*, Maid of Lothian, *Agamemnon*, yellow Turban, Napoleon, second premium, Mr. Wilson.

For the six third best, *Calypso*, Stone's yellow Perfection, Lady of the Lake, Mrs. Rushton, scarlet Perfection, and *Striata formosissima*, third premium, Mr. Wilson.

For the best lot of ten exotic plants—first premium to Mrs. Breer; second, to Mr. Wilson; third, to Mrs. Colman.

For best bouquet of dahlias—first premium to E. D. Hobbs; second, to E. D. Hobbs; third, to E. D. Hobbs.

For best bouquet of roses—first premium to E. D. Hobbs; second, to Mr. Wilson; third, to Miss Murray.

For the best single specimen of exotic—first premium to Mrs. Hite; second, to Mr. Shreve; third, to Mr. Wilson.

For best single specimen of roses—to Mrs. Colman, for a yellow Noisette.

For the best lot of apples presented, some large and fine varieties received the premium.

For the best peaches—first premium to Abraham Hite, for the Heath; second, to Mr. Thompson, for his blood clingstone; third, to Mrs. Addison, for a red freestone.

The first and second premiums on pears to Mr. Young, for the Seckel, the Holland green, the winter bergamots.

For the best nectarine, to Mr. Young.

For the best grapes—first premium to Mr. Longworth; second, to Mr. Abraham Hite, for the Catawba; third, to Mrs. Kendrick.

For the best lot sweet potatoes, to Mr. Thompson.

For the best lot of turnips, to Mr. Young.

For the best prize essay, to Mr. Young.

PENNSYLVANIA HORTICULTURAL SOCIETY.—We have at various periods during the present volume given some of the reports of the exhibitions of this Society. We have now before us the *Report* of the annual exhibition held on the 22d, 23d and 24th of September, occupying upwards of 30 octavo pages; we cannot, of course, in our limited space, give any thing more than a condensed account of such parts of it as will be most interesting to our readers.

Philadelphia, Sept. 6, 1841.—The anniversary meeting of the Society was held at its Hall this evening. On motion, Peter K. Gorgas, Esq., was called to the chair, and Thomas C. Percival appointed Secretary. The report of the Committee appointed at the last stated meeting to nominate candidates to fill the offices of the Society, was read. On motion, ordered, that the Society proceed to an election.

The following named gentlemen had a majority of votes; and they were accordingly declared duly elected officers for the ensuing year, viz:—

President.—Caleb Cope.

Vice Presidents.—Joseph Price, George Pepper, Gen. Robert Patterson, and David Landreth.

Treasurer.—John Thomas.

Corresponding Secretary.—John B. Smith.

Recording Secretary.—Thomas P. James.

Sept. 21st.—A stated meeting was held this evening. The President elect, on taking the chair, tendered his acknowledgments for the honor conferred on him. In assuming the duties to be discharged, he claimed the indulgence of the Society, whilst he could only promise the exercise of his best abilities and ardent efforts to promote the continued success of the institution.

The Library Committee submitted their annual report, from which it appears that during the past year sixty-five volumes have been added thereto, of which several have been donations. The Library contains at present three hundred and seventy bound volumes. Fines to the amount of seven dollars and seventy-five cents, have been received and added to the fund for the purchase of books.

Oct. 19th.—At this meeting a number of native varieties of grapes, from Richmond, Virginia, with the names appended, for which the Society is indebted to Mr. C. S. Langstroth, a member who has recently returned from a tour in that vicinity. A communication from Mr. Langstroth, describing the grapes, was read and ordered to be filed.

A bunch of native grapes were exhibited from N. Longworth, of Cincinnati, Ohio, which is said to be very hardy and delicious for the table or wine.

A communication from Mr. Longworth, accompanying the Ohio grapes, was also read and ordered to be entered on the minutes; purporting that he would give five hundred dollars for a native grape vine that should produce bunches of equal size, and fruit of equal quality for the table and for wine, to the bunch shown this evening. He stated that his vine was more hardy than any native with which he was acquainted, free from mildew, a fine bearer, and of vigorous growth. The bunch shown was larger and more compact than the Elsinborough, but in flavor and size of berry similar.

Among the objects exhibited were some seedling dahlias, as follows:—By Gerhard Schmitz; very fine, among which were the following new, Schmitz's Philadelphia, a white occasionally tipped with lilac; Schmitz's Columbus, a crimson; Beauty of Philadelphia, a yellow occasionally tipped with rose; and Schmitz's yellow Victory.

Thirteenth Annual Exhibition, September 22d, 23d, and 24th.—The Committee preface their report as follows:—

The Masonic Hall was obtained for the array, it being in their opinion the place where effect and comfort was most favorably combined, and it may be truly gratifying to the Society to know that the industry and zeal of contributors was fully and amply manifested on this occasion, which was freely conceded by the many thousands who witnessed the exhibition. This commendation of the public ought to be a source of great gratification to the Society; to know that their labors and exertions to create, mature, and bring to such an advanced state of perfection the various products of horticulture, were so warmly appreciated. The decided improvement in the growth and variety of vegetables; the great desire to possess and

grow the best of fruits; the warm, glowing, and diversified productions of Flora, are in a very great degree attributable to those profuse exhibitions and the free awards of this Society.

As our past efforts have produced such choice results, let us still go onward: we have yet much to accomplish, and hope for even grander achievements in every branch of our profession, from the garden of the cottager to the domain of the *millionaire*.

Your Committee desire to speak in the most flattering terms of the unity of purpose in every contributor, all seeming to have only one point in view, and that the general good and satisfaction of all: to all of whom your Committee desire to return their sincere obligations for their profuse contributions. They also tender their acknowledgments to the tasteful and intelligent ladies who so artistically entwined the wreaths and so beautifully arranged the gems of Flora.

An unusual number of pot plants were exhibited by various amateur gentlemen and nurserymen, the names of which are given entire in the report. The exhibition of dahlias, roses, &c., was as follows:—

Dahlias.—By Henry A. Dreer:—the premium for the best 20 varieties consisted of Argo (Widnall's,) Coronation (Elphinstone's,) Colossus (Brown's,) Countess of Torrington, Defiance (Horwood's,) Duchess of Richmond, Fisherton Champion (Squibb's,) Grace Darling (Dodds's,) Hero of Tippecanoe, Kingscote Rival, Lady Bathurst, Lady Webster (Knight's,) Miss Percival, Marshal Soult, North Star, Ne Plus Ultra (Widnall's,) Perfection (Mackenzie's,) Reliance (Widnall's,) Striata formosissima, and Unique (Ansell's.)

By Gerhard Schmitz:—The premium for the next best 20 varieties, Argo (Widnall's,) Fanny (Heiskill's,) Glory of Plymouth, Hero of Tippecanoe, Independence (Dennis'), Lord Morpeth, Miss Carpenter (Schmitz's,) Miss Percival, Madonna (Stanford's,) Marshal Soult (Elphinstone's,) Princess Victoria (Widnall's,) Ringleader (Wilmer's,) Seedling 1840 large purple, Seedling 1840 pure white cupped, Seedling 1840 cupped pure white tipped with rose, Seedling 1840 large purple, Seedling 1841 white, beautifully tipped with rose, Striata formosissima, Unique (Ansell's,) and Reliance (Widnall's.)

By William Sinton, gardener to Gen. Patterson:—The premium for the best ten varieties by amateurs: Hero of Tippecanoe, Kingscote Rival, Marshal Soult, Miss Percival, Ne Plus Ultra, Perfection (Mackenzie's,) Quilled Perfection, Reliance, Thomas Clarkson, and Unique (Ansell's.)

By Robert S. English:—The premium for the next best 10 varieties by amateurs: Lady Deacon, Mrs. Rushton (Buist's,) Nicholas Nickleby, Pickwick (Carmark's,) Pride of Sussex, Purple Perfection (Schmitz's,) Quilled Perfection (Brown's,) Striata formosissima, Suffolk Hero, and yellow Defiance (Cox's.)

There were other and splendid collections shown, but (as the contributors belonged to the Committee of Arrangements,) they were not offered in competition.

Extensive varieties were also furnished by the following contributors, viz: General Patterson, Robert Buist, D. Landreth & Fulton,

Lenfesty & Lentz, Peter Mackenzie, William Carville, of Haverford, Mrs. Hibbert, Israel S. Elliott, of Bristol township, Robert Kilvington and Thomas Hancock, of Burlington.

Roses.—By Robert Buist:—*Tea scented*,—Adelaide, Belle Archinto, Belle Marguerite, Bon Silene, Bougere, Burette, Caroline, Cels, Clara Sylvain, Dedaleon, Etienne, Eupheine, Flavescens, Flon, Goubault Hortense, Hymenee Isabelle, Lady Warender, Lillicine, Luxembourg, Madame Desprez, Melville, Odorata, Olympe, Princess Marie, Reine de Bonheur, Theobold, Victoire modeste, William Wallace. *Bengale*,—Admiral de Rigney, Aglae, Loth, Beau Carmin, Bisson, Cramoisie superieure, Etna, Eugene, Fabvier, Fernelon, Marjolin, Reine de Lombardie, Roi des Cramoisies and Triumphant. *Isle de Bourbon*,—Accidalie, Hermosa, Julie de Loynes, Le Brun, Madame Desprez, Marechal de Villars, Reine des Isles de Bourbon, and Theresita. *Noisette*,—Amelia, Belle Marsiellaise, Conque de Venus, Du Luxembourg, Fellemborg, Julia dante, Julienne le Sourde, La Biche, Lamarque, Madame Byrne, Rottanger and Superba.

By Peter Mackenzie:—*Tea Scented*,—Alba, Aurore, Bon Silene, Bougere, Bourbon, Clara Sylvain, Comtesse de Montmorency, Duc d'Orleans, Elvire, Jaune, Lady Warender, Miss Sergeant, Odoratissima, Princesse d'Esterhazy, Triomphe du Luxembourg, and Triomphe Victoire modeste. *Bengale*,—Belle de Monza, Eugene Pirolle, Grand Val, Louis Philippe d'Angers, Madame Desprez, Madame Hersant, Setula, and Triumphant. *Isle de Bourbon*,—Agrippina, Charles Desprez, Hermosa, Henri Plantier, Le Phenix, Madame Desprez, and Marechal de Villars. *Noisette*,—Ainee Vibert, Fellemborg, Lamarque, La Nympe, and yellow. *Perpetual*,—Stanwell. *Hybrid Provence*,—Gloire de la France.

By Ritchie & Dick:—*Tea Scented*,—Bougere, Gigantesque, Gloire de Hardy, Elvire, Roi de Siam, and yellow. *Bengale*,—Belle Isidore, Countess of Albemarle, Eugene Beauharnais, Fabvier, Madame Hersant, Prince Charles (Luxemb.), and Reine de Lombardie. *Isle de Bourbon*,—Armosa, Augustine Lelieur, Madame Desprez, Marechal de Villars, and Ninon de Lenclos.

By Andrew Dryburgh:—*Tea Scented*,—Archduchesse Therese Isabelle, Bougere, Burette, Caroline, Cels, Clara Sylvain, Dremont, Duc d'Orleans, Duchess d'Orleans, Magnifica, Madame Desprez, Mrs. Bosanquet, Odorata, Pæoniflora, Prince d'Esterhazy, Princesse de Mecklenburg, Princesse Helene (Modeste,) Princesse Marie, Triomphe de Bolwiller, Triomphe de Gand, Triomphe de Luxembourg. *Bengale*,—Archduc Charles, Augustine Hersant, Camellia Rouge, Clara Sylvain, Cramoisie du Luxemb'g, Fabvier, Fimbriata, Frederic Weiber, Marjolin, and Miellez. *Isle de Bourbon*,—Armosa, Madame Desprez, Marechal de Villars. *Noisette*,—Ainee Vibert, Camellia, Charles X., Euphrosine, Fellemborg, Jaune Desprez, La Biche, La Fayette, Lee and Renoncule.

Fancy Designs, Festoons, and Bouquets.—The larger floral designs were placed in the saloon, and, being surrounded by the varied foliage of the green and hot-house plants, added greatly to the effect of the exhibition. Designs of smaller dimensions were to be observed in the other apartments; some of the most admired were in

the fruit room. The tastefully arranged vases, the numerous chaste basket, cone, and small bouquets, were interspersed among the fruit with decided effect. The festoons which ornamented the exhibition were entwined with much good taste in front of the orchestra gallery, and above the entrance and exit of the fruit apartment.

These devices were as follows, and exhibited,

By Samuel Maupay, a large skeleton design of a temple, of proper proportions, with a spire ascending to the height of some twenty feet; within the supporting columns were arranged neat bouquets. And, by the same, a fine cone bouquet.

Joseph Cook, from the garden of William Norris, a fancy design of open square form, and of considerable dimensions, variously ornamented with flowers, executed with much labor. Andrew Dryburgh, a fancy structure of equal height with the two former; the basement was formed of columns some eight or more feet in height, well proportioned; the floor raised centrally to a column which in like manner spread out at the ceiling, meeting the supporting columns; upon the floor of the device were displayed a variety of tasteful bouquets of roses; the upper part of the design was fancifully ornamented.

Peter Fleming, gardener to William M. Camac, a large and beautiful classic urn, enveloped with a choice selection of flowers, with appropriate intermixture of verdure; it was universally admired. Alexander Caie, gardener to Mrs. Rowland, a very neatly constructed flower stand, of octagon form, about twelve feet in height, and terminated with a blooming yucca: the flowers which ornamented this device were very select, and interwoven with a due proportion of foliage; it was much admired, and highly creditable to the contributor. Peter Mackenzie, a fancy design, placed in the Gothic arch, above the outer entrance to the hall. It was an alcove of plants and flowers, having under its shade a hive of busy bees, and on one side a plough, and on the other a cornucopia, with the appropriate inscription above them of "Peace and Plenty," recorded in flowers.

By George Milroy, gardener to Samuel W. Gumbs:—A pyramid, formed entirely of dahlias in all the variety of colors of that beautiful flower, in height above 15 feet, crowned with an eagle. By Robert Henry, gardener to Wm. E. Rogers, a light open stand in form of a chandelier, covered with flowers. Also a floral harp, and other decorations. James Watt, a small model of a church, neatly ornamented with flowers. Andrew Patten, from Mrs. Kohne's garden, a tall antique vase of appropriate form.

By Israel S. Elliott, Bristol township, a lyre design of flowers. By Archibald Ritchie, a log cabin device with verdant and floral envelope. Also two very tasteful basket bouquets. By Daniel Reilly, gardener to Pierce Butler, a terraced mound of flowers. By Miss Smith, a neat cone bouquet. By Thomas Mullin, gardener to Miss Gratz, a high flat bouquet. By John J. Jenkins, a pyramid of a variety of flowers. By Wm. Chalmers, gardener to Mrs. Stott, a pair of festoons of much beauty, displaying good taste.

By John Sherwood, a pair of handsome festoons of good length, with a large floral star pendant from the centre. Also a basket bouquet of beautiful Roses. By the ladies, other beautiful festoons,

several handsome vases of flowers, and a great number of smaller bouquets. By Mrs. Gen. Patterson, three glass and porcelain vases of choice flowers, arranged with much taste. By Miss Percival, two exceedingly chaste basket bouquets. By Robert Kilvington, three basket bouquets of select flowers, and one of indigenous flowers.

Fruits.—The choice fruits were most temptingly displayed on a table of three elevations, extending through the centre of the banquetting room. Notwithstanding the anticipations of a scarcity in this department, there appeared but little wanting to make up the usual attraction, either in variety, quality, or amount. Of grapes, there were numerous varieties, some of which, for size of berry and weight of bunches, equalled any shown at previous exhibitions. Of peaches, some of the dishes contained choice specimens, one dish particularly fine, from a tree in this city 25 years old. Some of the delicious Bartlett pears from Boston, were seen among the varieties. Of apples, there were fine specimens. Several dishes of the luscious golden-drop pluin. And a great display of excellent quinces. Also dishes containing large lemons, pomegranates, papaws and cranberries. [The number of the contributors was numerous, amounting to upwards of sixty contributors, but no one exhibitor displayed above ten or twelve varieties.]

Vegetables.—In the apartment parallel to the one in which the fruit was shown on the west, were exhibited on tables around the room and upon one of larger size, also of three elevations, in the centre, the culinary vegetables and field products, in great profusion, and in some instances of immense proportions.

In this department of horticulture, where the products are more susceptible of immediate improvement, under the hand of art, than those of the orchard, a great advance in culture was manifest over previous exhibitions; the obvious results of the efforts of our Society. Among the most prominent objects of this portion of the spectacle were the Valparaiso squashes, weighing 100 pounds and upwards; egg plants, a dozen of which weighed 106 pounds, one of them 10 pounds; mammoth cabbage and Victoria rhubarb; white carrots and sweet potatoes, remarkable for size; also some large specimens of water melons and turnips, possessing good properties. And, among the objects of interest, were a couple of specimens of a hybrid between the South Sea squash and calabash, partaking of the nature of both parents; a contribution of 29 ears of corn, the product of five grains; a small ear of a new variety, and a new kind of potatoes, called "French potatoes," of five weeks' growth, said to be excellent for table use.

On a contribution of sugar beets averaging about 8 pounds in weight, from New Jersey, was stated a fact worthy of particular remark from its importance in rural economy, viz: that they were grown from seed planted on the 19th of June, in the soil from which a matured crop of peas had been gathered. An unusual number of vegetables were exhibited.

The Committee conclude their report in the following words:—

The onward march of horticulture in this community was strikingly manifest at the present exhibition; the great improvement in all the departments of that science was evinced in the increased variety

of exotic plants, the successful culture of the rarer and finer fruits, and the remarkable progress in the growth of culinary vegetables. Nor was the growing interest which our citizens generally feel in the subject, less apparent or less gratifying on the occasion, for at no former period have the rooms been more thronged with visitors, or more animated by a delighted and refined public. (*Soc. Report.*)

ART. III. *Massachusetts Horticultural Society.*

Saturday, Oct. 30th, 1841.—An adjourned meeting of the Society was held to-day—the President in the chair.

It was voted that the President be authorized to subscribe for the *American Orchardist* for the library of the Society.

Adjourned four weeks to Nov. 27th.

Exhibited.—Flowers: From S. Sweetser, the following dahlias, all very good specimens for the season:—Queen of Sarum, Hope, Princess Marie, Fire-ball, and Fair Maid of Clifton. From T. Lee, Princess Marie, and other fine roses.

Fruit:—From the President of the Society, Duchess d'Angouleme, Buffum, Glout Morceau, Beurré Diel, Passe Colmar, and Bleeker's Meadow pears. From William Oliver, St. Michael pears. From John Pierce, a specimen of corn, of good size and handsome appearance.

Nov. 6th. Exhibited.—Fruits: From the Rev. Dr. Harris, handsome Dix pears, from the original tree. From John Prince, Colmar, Sovereigne, Beurré Diel, Glout Morceau, and Urbaniste pears, with a kind the name of which was unknown. From E. Vose, a basket containing about two dozen of the finest Duchess d'Angouleme pears ever exhibited at the Society's room. The specimens were not remarkable for their size, but rather for their fairness and great beauty: they grew on a dwarf tree on the quince.

Nov. 13th. Exhibited.—Flowers: From the President of the Society, a collection of Jersey chrysanthemums.

Fruit: From R. Manning the following kinds of pears:—Lewis of Bologna, Enfants Prodige, Hacon's Incomparable, and No. 1218 unnamed from Van Mons—these were all sorts of fine qualities; also Tilling Frangipane, and No. 1230 unnamed from Van Mons, second rate compared with the four first named; Mr. Manning also exhibited specimens of the Cornish aromatic and red Gilliflower apples. From S. Pond, quinces. From L. P. Grosvenor, Duchess d'Angouleme pears.

ART. IV. Faneuil Hall Market.

<i>Roots, Tubers, &c.</i>		From	To	<i>Squashes and Pumpkins.</i>		From	To
		\$ cts.	\$ cts.			\$ cts.	\$ cts.
Potatoes:				Canada Crookneck, per lb...		2½	3
Chenangoes, } per barrel..	1	25	1 87½	Autumnal Marrow, per pound		2½	3
Eastports, } per bushel...	2	00	2 25	Winter Crookneck, per lb...		2	—
Common, } per barrel,....	1	25	—	Pumpkins, each, ...		12½	20
Sweet potatoes, per bushel,	1	00	1 25				
Turnips, per bushel:				<i>Fruits.</i>			
Common,.....	25	37½		Apples, dessert:			
Ruta Baga,.....	37½	50		Baldwins, per barrel,.....	2	50	3 00
Onions:				Russets, per barrel,.....	2	00	2 50
Red, per bunch,.....	2½	8		Greenings, per barrel,....	2	00	2 50
White, per bunch,.....	2½	8		Blue pearmain, per barrel,	2	50	3 00
White, per bushel,....	1	00	—	New York pippins, per bbl.	3	00	3 50
Yellow, per bushel,...	50	75	—	Common, per barrel,....	1	50	2 00
Beets, per bushel, ...	75	—	—	Pippins, per bushel,.....	1	00	1 25
Carrots, per bushel,.....	62½	—	—	Sweet, per bushel,.....	1	00	1 25
Parsnips, per bushel,.....	75	—	—	Pears, per dozen:			
Shallots, per pound,.....	20	—	—	Passe Colmar, ...	50	—	—
Garlic, per pound,.....	12½	—	—	Sylvainge Vert,.....	37½	50	—
Horseradish, per pound....	10	12½	—	St. Germain,.....	50	75	—
<i>Cabbages, Salads, &c.</i>				Chaumontel,.....	37½	50	—
Cabbages, per doz:				St. Michael Archangel...	37½	50	—
Savoy,.....	50	75	—	Beurre Diel,.....	50	—	—
Drumhead,.....	75	1 00	—	Lewis,.....	25	37½	—
Red Dutch,.....	75	—	—	Common,.....	25	—	—
Brocoli, each,.....	12½	25	—	Baking, per bushel,....	1	50	1 75
Cauliflowers, each,.....	12½	25	—	Citron melons, each,.....	12½	—	—
Lettuce, per head,.....	6	8	—	Cranberries, per bushel,...	1	50	1 75
Celery, per root:				Grapes per pound:			
Giant,.....	10	12½	—	Black Hamburg, (forced,)	50	—	—
Common,.....	6	8	—	Isabellas,.....	12½	—	—
Cucumbers, (pickled) pr gal.	25	—	—	Malaga, (white).....	20	25	—
Peppers, (pickled) per gallon	37½	—	—	Malaga, (purple).....	25	—	—
<i>Pot and Sweet Herbs.</i>				Pine-apples, each,.....	25	37½	—
Parsley, per half peck,.....	25	—	—	Quince, per bushel,.....	2	00	2 50
Sage, per pound,.....	17	20	—	Berberries, per bushel,....	75	—	—
Marjorum, per bunch,....	6	12½	—	Lemons, per dozen,.....	25	—	—
Savory, per bunch,.....	6	12½	—	Oranges, per doz:			
Spearmint, per bunch,.....	3	—	—	Havana,.....	50	75	—
				Sicily,.....	25	50	—
				Walnuts, per bushel,.....	1	50	1 75
				Chestnuts, per bushel,....	2	25	2 50
				Butternuts, per bushel,....	1	00	—
				Filberts, ...	—	—	—
				Cocoa nuts,.....	3	4	—

REMARKS.—November, up to this date, has been a pleasant month, with mild weather for the season: this has given a favorable opportunity to the farmer to harvest his crops, and prepare his work for the coming spring.

Vegetables.—At the time of our last report, there had been a slight reduction in the prices of potatoes, the stock of which, it was thought

at one period, would be so limited that they would command very high rates during the winter; but from the earliest season of harvesting up to the present moment, there has been a gradual reduction in prices, which are now as low as they were last year, in the month of November: notwithstanding the duty of ten per cent. on imported potatoes, no less than fifteen thousand bushels have arrived during the month; this supply, mostly from Nova Scotia, has filled the market; prices on the wharf have ranged as low as thirty-eight cents per bushel, and for those of excellent quality. Sweet potatoes are falling off in goodness, though there is yet a good stock. Turnips continue abundant. Onions are also plentiful, and in excellent keeping condition. Parsnips are now plentiful enough, and of handsome size. No forced radishes have yet made their appearance. Horseradish is abundant and good. The stock of cabbages is rather limited: the dry summer destroyed a greater portion of the young plants of the late crop, and the rains came too late to give those a full growth which survived: Savoys and drumheads readily command our prices. There is a very good supply of brocolis and cauliflowers. Forced lettuce now comes in of handsome size and good quality. Celery is abundant, excellent, and cheap: the season has been fine for it, the rains of August and September giving the young plants a free growth. Squashes keep very poorly; very few appear to have perfectly ripened: it is scarcely possible to procure a good sound squash of any kind in the market.

Fruit.—Apples hold about the same: good picked Baldwins are a shade higher: New York pippins have arrived within a week or two, and there is now a good supply of this excellent variety. Pears have continued to come in, affording, in the succession of kinds, a good supply: all those we have named may now be procured in our market: the Beurré Deils and St. Michael Archangels are uncommonly fine specimens. Cranberries were never more abundant: prices have not altered since October. Of quinces there is yet a fair supply. Malaga grapes are plentiful, several lots having lately arrived: other sorts are about gone, with the exception of a few Isabellas. Oranges and lemons are abundant for the season. Chestnuts and walnuts are unusually plentiful, of good quality, and sold at fair prices.—*M. T., Boston, Nov. 27th, 1841.*

HORTICULTURAL MEMORANDA

FOR DECEMBER.

FRUIT DEPARTMENT.

Grape vines will now have so far ripened their wood, that pruning may soon be commenced any time during the month, but when there are many vines to attend to, it is best to begin in season. Make all

the cuts clean with a sharp knife, and tie the shoots loosely in. After the work is done, the stems may be washed with a solution of sulphur and soap, to destroy any insects which may be lodged around the eyes. Place the cuttings in a box in a cellar, or bury them in the ground, if young plants are wanted another year. Vines in the open garden should be laid down, if not done before.

Fruit trees.—As the operation of planting is about over, attention should be given to those lately set out, a barrow of old manure should be placed around the roots of each tree, and, if exposed too much to the wind, they should be staked. Scions for grafting next spring may be cut now, placed in earth in the cellar, where they will be ready for use as early as wanted.

Raspberry plants, if before neglected, should be laid down this month.

FLOWER DEPARTMENT.

Camellias will now be the principal objects in the green-house. See that they are kept well supplied with water, the leaves washed from dust, and, if of straggling habit and appearance, neatly tied up; the pots should be washed clean, and the soil top-dressed with some sandy loam. Seeds should be planted now if not done before cuttings may also be put in at this season.

Chrysanthemums which have occupied the room in the green-house, now that they have done blooming, should be removed to the cellar or a frame, to make place for other plants.

Roses should be watered freely, and, if of straggling or weak growth, pruned in short. Cuttings may be put in now.

Oxalises potted last month will now be growing rapidly, and should be placed on an airy shelf, and kept well watered.

Geraniums should have attention: pick off any dead leaves, and if the stems run up, pinch off the tops to make it throw out laterally.

Cactuses should be sparingly watered, particularly the slender growing sorts, unless grafted on the strong kinds, which will bear more moisture.

Erica cuttings, put in in June or July, may be potted off now, if not done before.

Amaryllises may be potted now in good rich light soil.

Mignonette should be sparingly watered this month.

Sparaxis, Ixias, &c., planted in pots, and placed in frames, should now be removed to the green-house or parlor.

Tree pæonies, brought into the green-house now, will bloom early in the spring.

Verbenas should be placed on an airy shelf in the green-house, and kept moderately dry during this month.

Green-house plants generally will require much attention; all the pots should be washed, and the plants kept clear of all insects, particularly the green fly and spider. All crooked plants should be tied to a neat stick, the surface of the soil top-dressed, and if the label containing the name is defaced, or gone, a new one, carefully and legibly marked, should take its place. Nothing adds more to the cheerful appearance of a green-house, than to see cleanliness prevail every where.